NATIONAL MISSION FOR CLEAN GANGA (NMCG)

MINISTRY OF JAL SHAKTI DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION, GOVT. OF INDIA

जल शक्ति मंत्रालय
जल संसाधन, नदी विकास और गंगा संरक्षण विभाग
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES,
RIVER DEVELOPMENT & GANGA REJUVENATION

सत्यमेव जयते

DEVELOPMENT OF NEW SEWAGE TREATMENT PLANTS, REHABILITATION OF EXISTING SEWAGE TREATMENT INFRASTRUCTURE AND O&M FOR 15 YEARS IN KANPUR

UNDER

ONE CITY ONE OPERATOR CONCEPT THROUGH HYBRID ANNUITY BASED PPP MODE (HAM – KANPUR)

(STC agreement dated 19.04.2019 &LOA: Pr-12012/41/2018-PPP/NMCG dated 04.02.2019)

Monthly Progress Report

Of

Project Engineer

January - 2021

Executing Agency
Uttar Pradesh Jal Nigam
Benajhabar Road, Kanpur
Uttar Pradesh - 208002

Funding Agency
National Mission for Clean Ganga
MoWR, River Development & Ganga Rejuvenation,
New Delhi

Project Engineer
Shah technical Consultar
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Geeta Nagar
Kanpur
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ABBREVIATIONS

ASP	Activated Sludge Process
BEP	Basic Engineering Package
BOD	Biochemical Oxygen Demand
CETP	Common Effluent Treatment Plant
COD	Chemical Oxygen Demand
COD	Commercial Operation Date
CPs	Condition Precedent
CTE	Consent To Establish
CTO	Consent to Operate
DFGs	Dual Fuel Generators
DPR	Detailed Project Report
ESHS	Environment, Social, Health And Safety
GOI	Government of India
HAM	Hybrid Annuity Model
I&D	Interception & Diversion
IPS	Intermediate Pumping Station
KPIs	Key Performance Indicators
KRMPL	Kanpur River Management Private Limited
LOA	Letter of Award
MOM	Minutes of Meeting
MPS	Main Pumping Station
O&M	Operation and Maintenance
PLC	Programmable Logic Control
PMC	Project Management Consultant
PDD	Proposal Due Date
PDMC	Project Development and Monitoring Consultant
PPP	Public Private Partnership
QAP	Quality Assurance Plan
RFP	Request for Proposal
RTU	Remote Terminal Unit
RTOLMS	Real Time Online Monitoring System
TOR	Terms of Reference
SBR	Sequential Batch Reactors
STP	Sewage Treatment Plant
TEPH	Treated Effluent Pump House
UASB	Up-Flow Anaerobic Sludge Blanket Reactor

MONTHLY PROGRESS REPORT – HAM KANPUR

1 INTRODUCTION

The Govt. of India, recognizing that long-term rejuvenation of the river Ganga will have significant social and economic benefits on the lives of the 500 million people living along its basin, has identified cleaning of the river Ganga as one of its priorities. For this purpose, in May 2015, the GoI approved the flagship Namami Gange programme for cleaning, rejuvenation, and protection of the river Ganga. In January 2016, the GoI approved a hybrid annuity model to implement STP projects under the Namami Gange programme on a PPP basis.

Subsequently, the MoWR issued the River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 (Ganga 2016 Order) to constitute various authorities to assist the GoI in achieving its aim of effective abatement of pollution in the river Ganga. The Ganga 2016 Order applies to all states in the catchment of the river Ganga basin, including Uttar Pradesh. The Ganga 2016 Order revised the legal status of NMCG (which was initially constituted as a registered society under the Societies Registration Act, 1860) to an authority constituted under the Environment (Protection) Act, 1986 and designated NMCG as the nodal agency for the implementation of the Ganga 2016 Order.

Rapidly increasing population, rising standards of living and exponential growth of industrialisation and urbanisation have exposed water resources, in general, and rivers, in particular, to various forms of degradation. The mighty Ganga is no exception. The deterioration in the water quality impacts the people immediately. Ganga, in some stretches, particularly during lean seasons has become unfit even for bathing. The threat of global climate change, the effect of glacial melt on Ganga flow and the impacts of infrastructural projects in the upper reaches of the river, raise issues that need a comprehensive response.

The Uttar Pradesh Jal Nigam (Jal Nigam) is a statutory body constituted under the Uttar Pradesh Water Supply and Sewerage Act 1975, and has the power to develop, maintain and regulate water supply and sewerage works in Uttar Pradesh. With a view to implement the Namami Gange programme and the Ganga 2016 order in the State of Uttar Pradesh, the Jal Nigam, in association with NMCG has decided to undertake the development of:

- three new STP facilities(30 MLD Pankha, 15 MLD Unnao&5 MLD Shuklaganj)and their O&M for 15 years;
- rehabilitation of existing 130 MLD Jajmau Phase-I STP facility with O&M for 15 years and;
- O&M for three existing STP facilities (43 MLD Jajmau Phase-II, 210 MLD Bingawan&42 MLD Sajari) in Kanpur under Hybrid Annuity based PPP mode.

While the Jal Nigam will be the principal executing agency and bidding authority for the Project, NMCG will be responsible for making payments to the Concessionaire and Project Engineer.

2 HYBRID ANNUITY MODEL (HAM)

Government of India has approved the Namami Gange program as an integrated approach for effective abatement of pollution in river Ganga and Yamuna. As part of this and to ensure that no untreated domestic sewage flow into the river Ganga and Yamuna, various interventions are planned such as Interception & Diversion works and development & operation of Sewage Treatment Plants (STPs).

Considering various development models in practice for the construction, operation and maintenance of Sewage Treatment Plants, Government of India has approved the Hybrid Annuity based Public Private Partnership (PPP) mode as one of the options for the development & operation of STPs. Under this model, private investor/developer will design, build, finance, construct, rehabilitate, renovate, operate and maintain the asset (STPs, IPS, and MPS) to the Project Executing Agency/Jal Nigam at the end of the Concession Period (15 years). 40% of the Capital cost will be paid to the developer during construction of the STP. Balance 60% along with Operation & Maintenance (O&M) cost will be paid over the Concession Period on achievement of key performance indicators as per the contract. Entire cost of development and operation of the STPs will be 100% funded by the Government of India as central sector scheme.

NMCG & UPJN appointed M/s. Shah Technical Consultant Pvt. Ltd., as third party engineering firm as Project Engineer for this project through tendering process. Letter of Award is issued dated 4th February 2019 and agreement signed between the parties on 12th April 2019.

3 OBJECTIVES

To achieve above objectives effective development of STPs at Unnao, Shuklaganj and Pankha rehabilitation of existing STPs with O&M for 15 years in Kanpur are proposed under this program. The objectives that NMCG and the UP Jal Nigam wish to achieve through the Project are mentioned in Figure 1.

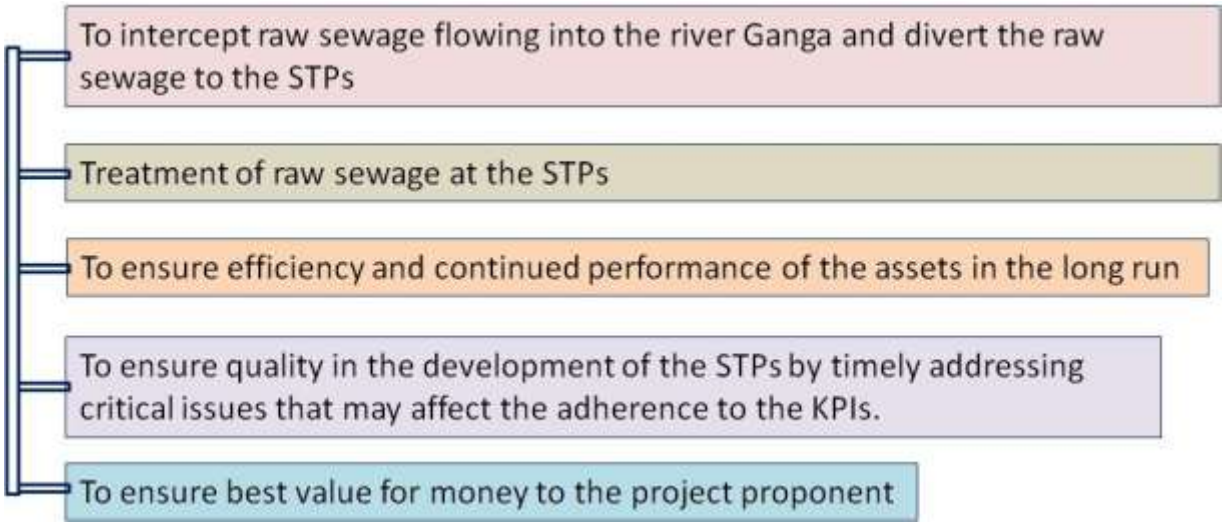


Figure 1: Objectives of NMCG and UP JAL NIGAM

4 HAM KANPUR PROJECT AT A GLANCE

Details of HAM Kanpur project are given in the following table:

Table 2.1: HAM Kanpur Project at a Glance

Particulars		Description
Name of Project	:	Development of new Sewage Treatment Plants and O&M for 15 years, Rehabilitation of existing Sewage Treatment Infrastructure and O&M for 15 years in Kanpur under One City One Operator concept through Hybrid Annuity based PPP mode. (HAM – Kanpur)
Client	:	National Mission for Clean Ganga (NMCG), New Delhi and UP Jal Nigam
Execution Agency	:	Uttar Pradesh Jal Nigam (UPJN)
Consultant	:	Shah Technical Consultants (P) Ltd. as **'Project Engineer'**
Agreement &LOA	:	STC Agreement dated 12.04.2019 & LOA: Pr-12012/41/2018-PPP/NMCG dated 04.02.2019
Concessionaire	:	Kanpur River Management Private Limited (KRMPL) an SPV of Shapoorji Pallonji& Company Private Limited, Mumbai
Concessionaire's Agreement	:	14/GM/2018-19dated 21.12.2018
Cost of Project (CAPEX+OPEX)	:	Rs. 816.25 Cr. (CAPEX 255.50 Cr. + OPEX 560.75 Cr.)
Effective Date	:	11.10.2019
Completion date (as per contract)	:	24 Months from effective date (21 months construction + 3 months trial run)
O&M period	:	15 years after last Commercial Operation Date (COD)
Description of Work	:	➢ Construction of three new STPs (SBR) at different locations (30 MLD at Pankha, 15 MLD at Unnao and 5 MLD STP at Shuklaganj) and related infrastructure with 15 years of O&M; ➢ Rehabilitation of 130 MLD (Phase-I) STP at Jajmau with construction of 200 MLD TEPS and 173 MLD CCT at Jajmau with O&M for 15 years; ➢ O&M of 43 MLD (Phase-II) Jajmau facilities, O&M of 210 MLD Bingawan facilities and O&M of 42 MLD Sajari facilities for 15 years;

5 PROJECT WISE DETAILS OF COMPONENTS UNDER HAM KANPUR PROJECT

HAM Kanpur project is divided into 5 districts of the Kanpur– Pankha (District –III, Kanpur), Unnao & Shuklaganj – (District Unnao), Jajmau – (District I, Kanpur), Bingawan – (District II, Kanpur) and Sajari – (District IV, Kanpur).

Under this project, development and O&M work of total seven STP facilities are proposed in which three new STP facilities based on SBR technology with associated infrastructure have been proposed for - 30 MLD Pankha (District III, Kanpur), 15 MLD Unnao&5 MLD Shuklaganj.

Rehabilitation and O&M for 15 years is proposed for 130 MLD Jajmau STP facilities (Phase-I) and O&M of 210 MLD USAB based Bingawan STP facilities, 43 MLD Jajmau Phase-II and for 42 MLD ASP based Sajari STP facilities for 15 years.

5.1 PANKHA FACILITIES

Project wise components details of Pankha Facilities are given in table 5.1:

Table 5.1: Pankha Facilities

SN	STP Facilities	Capacity/dia. /size	No. of units/length
	Date of Start- Effective Date (11.10.2019)		
	Scope of Work- New Construction and O&M		
1.1	STP	30 MLD	1
1.2	MPS	115MLD	1
1.3	ICI Nala IPS	25 MLD	1
1.4	Sundar Nagar IPS	20 MLD	1
1.5	Thermal Nala (A)(tapping)	22 MLD	1
1.6	Thermal Nala (B)(tapping)	8 MLD	1
1.7	ICI Nala (tapping)	7.85 MLD	1
1.8	Common Collection chamber	-	1
1.9	Rising main (ICI Nala IPS to collection chamber)	800mm-ϕ	6.91km
1.10	Rising main (Sundar Nagar IPS to collection chamber)	800mm-ϕ	0.651km
1.11	Gravity main (Thermal Nala B Tapping to common collection chamber)		
1.12	Common Gravity main (collection chamber to MPS)	2000mm- ϕ	1.948Km
1.13	Sewage network	350mm-ϕ 400 mm-ϕ 450 mm-ϕ 500 mm-ϕ 600 mm-ϕ 700 mm-ϕ 800 mm-ϕ	2.771km 1.359km 1.272km 1.243km 1.778km 1.487km 1.012km

		900 mm-ϕ 1200 mm-ϕ 1600 mm-ϕ 2000 mm-ϕ	2.170km 3.634km 1.596km 1.948km
1.14	**Milestones**	**Date**	**Amount in Rs.**
	1st Milestone	12-Oct-2019 to 25-Apr-2020	1248,39,750
	2nd Milestone	26-Apr-2020 to 10-Jul-2020	1248,39,750
	3rd Milestone	11-Jul-2020 to 24-Sep-2020	1248,39,750
	4th Milestone	25-Sep-2020 to 09-Dec-2020	1248,39,750
	5th Milestone	10-Dec-2020 to 13-Feb-2021	1248,39,750
	6th Milestone	14-Feb-2021 to 21-Apr-2021	1248,39,750
	7th Milestone	22-Apr-2021 to 22-Jun-2021	1248,39,750
	8th Milestone	23-Jun-2021 to 25-Aug-2021	1248,39,750

5.2 UNNAO FACILITIES

Project wise components details of Unnao Facilities are given in table 5.2:

Table 5.2: Unnao Facilities

SN	**STP Facilities**	**Capacity/ dia. /size**	**No. of units/length**
	Date of Start- Effective Date (11.10.2019)		
	Scope of Work- New Construction and O&M		
1.1	STP	15 MLD	1
1.2	Sump cum Pump house (MPS)	40 MLD	1
1.3	Trunk Sewer	1200mm ϕ	3.2Km
1.4	I&D works (Nala tapping)	40 MLD	1
1.5	Trash screen	7m-1.7m x 0.8m	1
1.6	Grit chamber	12m-4m x 1m	2
1.7	Collection chamber	3.4m-6.2m x 3m	1
1.8	Rising main (MPS to STP)	750mm ϕ	100m
1.9	Rising main (bypass)	750mm ϕ	100m
1.10	Effluent distribution chamber	-	1
1.11	Effluent gravity channel (STP to discharge point)	1.5m x 1.0m	300m
1.12	Effluent disposal drains	-	500m
1.13	**Milestones**	**Date**	**Amount in Rs.**
	1st Milestone	12-Oct-2019 to 24-Feb-2020	478,36,250
	2nd Milestone	25-Feb-2020 to 15-May-2020	478,36,250
	3rd Milestone	16-May-2020to 30-Jul-2020	478,36,250

	4th Milestone	30-Jul-2020to 14-Oct-2020	478,36,250
	5th Milestone	15-Oct-2020to 24-Dec-2020	478,36,250
	6th Milestone	10-Dec-2020 to 01-Mar-2021	478,36,250
	7th Milestone	02-Mar-2021 to 05-May-2021	478,36,250
	8th Milestone	06-May-2021to 10-Jul-2021	478,36,250

5.3 SHUKLAGANJ STP FACILITIES

Project wise components details of Shuklaganj STP are given in table 5.3:

Table 5.3: Shuklaganj Facilities*

SN	STP Facilities	Capacity/dia. /size	No. of units/length
	Date of Start- Effective Date (11.10.2019)		
	Scope of Work- New Construction and O&M		
1.1	STP	5 MLD*	1
1.2	Sump cum Pump house (MPS)	20 MLD	1
1.3	Connecting sewer	-	1
1.4	I&D works (Nala tapping)	-	1
1.5	Collection chamber	-	1
1.6	Rising main (MPS to STP)	500mm ϕ	50m
1.7	Rising main (bypass)	500mm ϕ	50m
1.8	Retaining wall		1
1.9	Effluent channel (STP to discharge point)	1.5m x1m	100m
1.10	**Milestones**	**To be submitted***	

**CTE for new land has been received in July 2020.Geotech survey is in progress*

5.4 JAJMAU (PHASE I) FACILITIES

Project wise components details of Jajmau are given in table 5.4:

Table 5.4: Jajmau Facilities

SN	STP Facilities	Capacity/dia. /size	No. of units/length
A	**Phase-I**		
	Date of Start- Effective Date (11.10.2019)		
	Scope of Work- Renovation and O&M		
1.1	STP 1 on ASP technology with power Generation	130 MLD	1
1.2	Sump cum Pump house (TEPH)	200 MLD	1
1.3	CCT	173 MLD	1
1.4	Nawabganj IPS	-	1
1.5	Parmat IPS	-	1
1.6	Baba Ghat/Muar mill IPS	-	1

1.7	GuptarGhat IPS	-	1
1.8	Jajmau CSPS	-	1

5.5 JAJMAU PHASE II STP FACILITY

Project wise components details of Jajmau Phase II are given in table 5.4:

SN	STP Facilities	Capacity/ dia. /size	No. of units/length
	Schedule Handing Over Date- 01.10.2019		
	Scope of Work- O&M		
1.1	STP 2 on ASP technology with power Generation	43 MLD	1
1.2	Sanjaypuram IPS	-	1
1.3	Khalisa lane IPS	-	1
1.4	Jajmau MPS	-	1

5.6 BINGAWAN FACILITIES

Project wise component detail of Bingawan is given in table 5.5:

Table 5.5: Bingawan Facilities

SN	STP Facilities	Capacity /dia. /size	No. of units/length
	Schedule Handing Over Date- 01.04.2019		
	Scope of Work- Renovation and O&M for 15 years		
1.1	STP on UASB Technology with power generation	210 MLD	1
1.2	Installation of online monitoring system (RTOLMS)		L.S.
1.3	Bingawan MPS	200 MLD	1
1.4	Rakhimandi IPS	100 MLD	1
1.5	Halwakhanda IPS	20 MLD	1
1.6	Munshipurwa IPS	67 MLD	1
1.7	ShisamauNala (tapping)	8MLD	1

5.7 SAJARI FACILITIES

Project wise component detail of Sajari is given in table 5.6

Table 5.6: Sajari Facilities

SN	STP Facilities	Capacity/dia. /size	No. of units/length
	Schedule Handing Over Date- 11.10.2019		
	Scope of Work- O&M for 15 years		
1.1	STP on ASP technology	42 MLD	1
1.2	MPS	42 MLD	1
1.3	Chakeri IPS	14 MLD	1
1.4	Sanigawan IPS	14 MLD	1

6 PHYSICAL PROGRESS OF WORK

As per the provision of Concessionaire Agreement, effective date of the project was to be declared before 19th April 2019. Effective date for work execution under HAM Kanpur project was declared on 11th October 2019. Hence, work related to construction / execution of new STP facilities and related infrastructure i.e. Pankha, Unnao & Shuklaganj and renovation of existing facilities i.e. Jajmau 130 MLD started after effective date.

The overall physical progress of the facilities have been taken in the same proportion as financial progress as per milestones in approved Construction Plan. Overall progress can be monitored as project works have been divided in eight milestones each having progress of 12.5%. The scheduled date of project completion is 10th October 2021 i.e. 24 months from the effective date.

6.1 MILESTONE WISE ACTIVITIES AND PROGRESS: PANKHA STP FACILITIES

Milestone wise activities and their progress of work for Pankha STP are given in table 6.1:

Table 6.1: Pankha STP Facilities

S. No.	Description of Items	Milestone-1 (From 26th Nov.'19 to 25th Sep'20)		Achieved against 2nd Milestone		Achieved against 3rd Milestone	
		%	Amount(Rs.)	%	Amount	%	Amount
A	**Design & Drawing & STP & Sewer Laying works**						
	A. On approval of BEP	100%	249,67,950.00				
	B. On approval of design & drawings for Civil & Sewerage works	100%	249,67,950.00				
B	**CONSTRUCTION**						
	STP (30 MLD)						
1	**SBR Basin Area**						-
	CIVIL WORK						-
	Site Clearance	100%	2,50,000.00				-
	Excavation	100%	98,38,400.00				-
	PCC	100%	147,57,600.00				-
	RCC Foundation/Raft	40%	98,38,400.00	60%	147,57,600.00		-
	Wall 50% of total lift work		-	100%	245,96,000.00		-
	Walls (balance 50% of Total Lift work)		-		-	55%	135,27,800.00
	Baffle Walls work		-		-		-
	Walkway/Platform		-		-		-
	Finishing Work		-		-		-
2	**Chlorine Contact Tank Area**				-		-
	Site Clearance	100%	1,50,000.00		-		-
	Excavation	100%	7,37,880.00		-		-
	PCC	100%	11,06,820.00		-		-
	RCC Foundation/Raft		-	100%	46,11,750.00		-
	Wall 50% of total lift work		-	100%	27,67,050.00		-
	Walls (balance 50% of Total Lift work)		-		-	95%	26,28,697.50
	Baffle Walls work		-		-		-
	Finishing Work		-		-		-

S. No.	Description of Items	Milestone-1 (From 26th Nov.'19 to 25th Sep'20)		Achieved against 2nd Milestone		Achieved against 3rd Milestone	
		%	Amount(Rs.)	%	Amount	%	Amount
3	**Chlorination House Area**				-		-
	CIVIL WORK				-		-
	Site Clearance	100%	1,00,000.00		-		-
	Excavation	100%	3,68,940.00		-		-
	PCC	100%	5,53,410.00		-		-
	RCC Foundation/Column footing		-	100%	27,67,050.00		-
	Column & Beam		-	50%	4,61,175.00	50%	4,61,175.00
	Ground floor Slab		-		-	30%	2,76,705.00
	Column & Beam		-		-		-
	Roof Slab		-		-		-
	Brickwork & Plaster		-		-		-
	Finishing Work		-		-		-
4	**Sludge Thickener Area**				-		-
	CIVIL WORK				-		-
	Site Clearance	100%	1,00,000.00		-		-
	Excavation	100%	7,37,880.00		-		-
	PCC	100%	11,06,820.00		-		-
	RCC Foundation wall/base slab		-	100%	36,89,400.00		-
	Wall 50% of total lift work		-	100%	27,67,050.00		-
	Walls (balance 50% of Total Lift work)		-		-	35%	9,68,467.50
	Finishing Work		-		-		-
5	**Inlet / Stilling Chamber Area**				-		-
	Site Clearance		-	100%	50,000.00		-
	Excavation		-	100%	2,45,960.00		-
	PCC		-	100%	3,68,940.00		-
	RCC Foundation/Column footing		-	100%	12,29,800.00		-

S. No.	Description of Items	Milestone-1 (From 26th Nov.'19 to 25th Sep'20)		Achieved against 2nd Milestone		Achieved against 3rd Milestone	
		%	Amount(Rs.)	%	Amount	%	Amount
	Column & Beam		-		-	65%	5,99,527.50
	RCC Slab		-		-		-
	RCC Wall		-		-		-
	Final finishing including Staircases, Railing, Shade, Painting, etc.		-		-		-
6	**Manual & Mechanical Fine Bar Screen Chamber Area**				-		-
	Site Clearance		-		-	100%	50,000.00
	Excavation		-		-	100%	2,45,960.00
	PCC		-		-	100%	3,68,940.00
	RCC Foundation		-		-	80%	9,83,840.00
	Column & Beam		-		-		-
	RCC Slab		-		-		-
	RCC Wall		-		-		-
	Walkway/Platform		-		-		-
	Finishing Work		-		-		-
7	**Grit Chamber (Mechanical Cleaned) & (Manually Cleaned)**				-		-
	Site Clearance		-		-	100%	50,000.00
	Excavation		-		-	100%	2,45,960.00
	PCC		-		-	100%	3,68,940.00
	RCC Foundation		-		-	70%	8,60,860.00
	Column & Beam		-		-		-
	RCC Slab		-		-		-
	RCC Wall		-		-		-
	Walkway/Platform		-		-		-
	Finishing Work		-		-		-
8	**Flow Measurement Channel Area**				-		-
	Site Clearance		-		-	100%	50,000.00

S. No.	Description of Items	Milestone-1 (From 26th Nov.'19 to 25th Sep'20)		Achieved against 2nd Milestone		Achieved against 3rd Milestone	
		%	Amount(Rs.)	%	Amount	%	Amount
	Excavation		-		-	100%	2,45,960.00
	PCC		-		-	100%	3,68,940.00
	RCC Foundation		-		-	100%	12,29,800.00
	Column & Beam		-		-		-
	RCC Slab		-		-		-
	RCC Wall		-		-		-
	Walkway/Platform		-		-		-
	Finishing Work		-		-		-
9	**Admin Bldg Area**				-		-
	Site Clearance	100%	1,00,000.00		-		-
	Excavation	100%	3,68,940.00		-		-
	PCC	100%	5,53,410.00		-		-
	Column footings/Foundation		-	100%	18,44,700.00		-
	Column & Beam		-		-	80%	14,75,760.00
	Ground Floor Slab		-		-		-
	1st Floor Slab		-		-		-
	Roof Slab		-		-		-
	Brickwork & Plaster		-		-		-
	Finishing Work		-		-		-
					-		-
10	**Air Blower Room Area**				-		-
	Site Clearance		-		-		-
	Excavation		-		-		-
	PCC		-		-		-
	Column footings/Foundation		-		-		-
	Column & Beam		-		-		-

S. No.	Description of Items	Milestone-1 (From 26th Nov.'19 to 25th Sep'20)		Achieved against 2nd Milestone		Achieved against 3rd Milestone	
		%	Amount(Rs.)	%	Amount	%	Amount
	RCC Ground Floor Slab		-		-		-
	RCC Roof Slab		-		-		-
	Brickwork & Plaster		-		-		-
	Finishing Work		-		-		-
11	**Staff Quarter Area**				-		-
	Site Clearance		-		-		-
	Excavation		-		-		-
	PCC		-		-		-
	RCC Foundation/column footing		-		-		-
	Column & Beam		-		-		-
	RCC Ground Floor Slab		-		-		-
	RCC Roof Slab		-		-		-
	Brickwork & Plaster		-		-		-
	Electrical work		-		-		-
	Finishing Work		-		-		-
12	**Guard Room Area**				-		-
	Site Clearance		-		-		-
	Excavation		-		-		-
	PCC		-		-		-
	RCC Foundation/column footing		-		-		-
	Column & Beam		-		-		-
	RCC Ground Floor Slab		-		-		-
	RCC Roof Slab		-		-		-
	Brickwork & Plaster		-		-		-
	Electrical work		-		-		-
	Finishing Work		-		-		-

S. No.	Description of Items	Milestone-1 (From 26th Nov.'19 to 25th Sep'20)		Achieved against 2nd Milestone		Achieved against 3rd Milestone	
		%	Amount(Rs.)	%	Amount	%	Amount
13	**Sludge Dewatering System Area (Centrifuge Pump House, Sludge sump & Poly dosing tank)**				-		-
	Site Clearance		-		-	100%	1,00,000.00
	Excavation		-		-	100%	6,14,900.00
	PCC		-		-	100%	9,22,350.00
	RCC Foundation		-		-		-
	1st Column & Beam		-		-		-
	Ground Floor Slab		-		-		-
	2nd Column & Beam		-		-		-
	RCC Roof Slab		-		-		-
	Brickwork & Plaster		-		-		-
	Finishing Work		-		-		-
14	**Supernatant Recirculation Sump Area**				-		-
	Site Clearance		-		-		-
	Excavation		-		-		-
	PCC		-		-		-
	RCC Foundation wall/base slab		-		-		-
	Wall 50% of total lift work		-		-		-
	Walls (balance 50% of Total Lift work)		-		-		-
	Final finishing including Staircases, Railing, Shade, Painting etc.		-		-		-
					-		-
15	**Transformer Yard Area**				-		-
	Site Clearance		-		-		-
	Excavation & PCC		-		-		-
	Foundation Work		-		-		-
	Finishing Work		-		-		-
16	**DG Area**				-		-

S. No.	Description of Items	Milestone-1 (From 26th Nov.'19 to 25th Sep'20)		Achieved against 2nd Milestone		Achieved against 3rd Milestone	
		%	Amount(Rs.)	%	Amount	%	Amount
	Site Clearance		-		-		-
	Excavation & PCC		-		-		-
	Foundation Work		-		-		-
	Finishing Work		-		-		-
17	**Sludge Storage Platform**				-		-
	Site Clearance		-		-		-
	Excavation & PCC		-		-		-
	Foundation Work		-		-		-
	Finishing work		-		-		-
18	**EXTERNAL DEVELOPMENT**				-		-
A.	Roads, Storm Water Drain & Miscellaneous work		-		-		-
B.	**Compound Wall with Gate**		-		-		-
	Excavation & PCC	40%	24,59,600.00	20%	12,29,800.00	20%	12,29,800.00
	RCC Column footing	40%	24,59,600.00	20%	12,29,800.00	20%	12,29,800.00
	RCC Column & Beam	40%	24,59,600.00	20%	12,29,800.00	20%	12,29,800.00
	Brickwork & Plaster		-	20%	12,29,800.00	20%	12,29,800.00
	Finishing Work		-		-		-
19	**MPS-2 (115MLD)**				-		-
	CIVIL		-		-		-
A	**Construction of Raw Sewage Sump**		-		-		-
	Site Clearance	100%	1,50,000.00		-		-
	Excavation	15%	5,17,760.10	85%	29,33,973.90		-
	PCC		-	100%	23,01,156.00		-
	RCC Foundation/Raft		-	50%	28,76,445.00	50%	28,76,445.00
	Wall 50% of total lift work		-		-	85%	32,59,971.00
	Column & Beam		-		-		-

S. No.	Description of Items	Milestone-1 (From 26th Nov.'19 to 25th Sep'20)		Achieved against 2nd Milestone		Achieved against 3rd Milestone	
		%	Amount(Rs.)	%	Amount	%	Amount
	Walls (balance 50% of Total Lift work)		-		-		-
	Ground Floor Slab		-		-		-
	Finishing Work		-		-		-
B	**Construction of Inlet Chamber & Screen Channel**		-		-		-
	Site Clearance	100%	50,000.00		-		-
	Excavation		-		-	100%	6,81,824.00
	PCC		-		-		-
	RCC Foundation/Raft		-		-		-
	Wall 50% of total lift work		-		-		-
	Walls (balance 50% of Total Lift work)		-		-		-
	Walkway/Platform		-		-		-
C	**Construction of Raw Sewage Pump House**		-		-		-
	Column & Beam		-		-		-
	Roof Slab		-		-		-
	Brickwork & Plaster		-		-		-
	Finishing Work		-		-		-
D	**MECHANICAL WORK**		-		-		-
20	**ICI Nala IPS**				-		-
	CIVIL		-		-		-
A	**Construction of Raw Sewage Sump**		-		-		-
	Site Clearance	100%	1,50,000.00		-		-
	Excavation		-	100%	15,33,600.00		-
	PCC		-	100%	10,22,400.00		-
	RCC Foundation/Raft		-	50%	12,78,000.00	50%	12,78,000.00
	Wall 50% of total lift work		-		-	66%	16,86,960.00
	Column & Beam		-		-		-

S. No.	Description of Items	Milestone-1 (From 26th Nov.'19 to 25th Sep'20)		Achieved against 2nd Milestone		Achieved against 3rd Milestone	
		%	Amount(Rs.)	%	Amount	%	Amount
	Walls (balance 50% of Total Lift work)		-		-		-
	Ground Floor Slab		-		-		-
	Finishing Work		-		-		-
B	**Construction of Inlet Chamber & Screen Channel**		-		-		-
	Site Clearance		-		-	100%	50,000.00
	Excavation		-		-		-
	PCC		-		-		-
	RCC Foundation/Raft		-		-		-
	Wall 50% of total lift work		-		-		-
	Walls (balance 50% of Total Lift work)		-		-		-
	Walkway/Platform		-		-		-
	Finishing work		-		-		-
C	**Construction of Raw Sewage Pump House**		-		-		-
	Column & Beam		-		-		-
	Roof Slab		-		-		-
	Brickwork & Plaster		-		-		-
	Finishing Work		-		-		-
D	**Construction of Office Room**		-		-		-
	Site Clearance		-		-		-
	Excavation & PCC		-		-		-
	RCC Foundation/column footing		-		-		-
	Column & Beam		-		-		-
	RCC Ground floor Slab		-		-		-
	RCC Roof Slab		-		-		-
	Brick work & Plaster		-		-		-
	Electrification, plumbing, fixtures		-		-		-

S. No.	Description of Items	Milestone-1 (From 26th Nov.'19 to 25th Sep'20)		Achieved against 2nd Milestone		Achieved against 3rd Milestone	
		%	Amount(Rs.)	%	Amount	%	Amount
	Finishing work		-		-		-
E	**Construction of Guard Room**		-		-		-
	Site Clearance		-		-		-
	Excavation & PCC		-		-		-
	RCC Foundation/column footing		-		-		-
	Column & Beam		-		-		-
	RCC Ground floor Slab		-		-		-
	RCC Roof Slab		-		-		-
	Brick work & Plaster		-		-		-
	Electrification, plumbing, fixtures		-		-		-
	Finishing work		-		-		-
F	**Transformer Yard, DG Yard**		-		-		-
	Site Clearance		-		-		-
	Excavation & PCC		-		-		-
	Foundation Work		-		-		-
	Finishing Work		-		-		-
I	**Construction of Boundary wall & Internal Road**		-		-		-
	Site Clearance		-		-		-
	Excavation & PCC		-		-		-
	RCC Column footing		-		-		-
	RCC Column & Beam		-		-		-
	Brickwork & Plaster		-		-		-
	Finishing		-		-		-
	Construction of Internal road		-		-		-
21	**IPS-6 (Sundar Nagar- 20 MLD)-Pankha Area**				-		-
	CIVIL		-		-		-

S. No.	Description of Items	Milestone-1 (From 26th Nov.'19 to 25th Sep'20)		Achieved against 2nd Milestone		Achieved against 3rd Milestone	
		%	Amount(Rs.)	%	Amount	%	Amount
A	**Construction of Raw Sewage Sump**		-		-		-
	Site Clearance	100%	1,50,000.00		-		-
	Excavation	11%	1,68,696.00	89%	13,64,904.00		-
	PCC		-	100%	10,22,400.00		-
	RCC Foundation/Raft		-		-	100%	25,56,000.00
	Wall 50% of total lift work		-		-	60%	15,33,600.00
	Column & Beam		-		-		-
	Walls (balance 50% of Total Lift work)		-		-		-
	Ground Floor Slab		-		-		-
	Finishing Work		-		-		-
B	**Construction of Inlet Chamber & Screen Channel**		-		-		-
	Site Clearance		-		-		-
	Excavation & PCC		-		-	50%	2,13,000.00
	RCC Foundation/Raft		-		-		-
	Wall 50% of total lift work		-		-		-
	Walls (balance 50% of Total Lift work)		-		-		-
	Walkway/Platform		-		-		-
	Finishing work		-		-		-
22	**I&D Works**				-		-
A	**ICI Nala**		-		-		-
	Construction Work		-	13%	2,89,120.00	67%	14,90,080.00
	Tapping of Nallahs		-		-		-
	Electro-Mechanical work		-		-		-
	Testing		-		-		-
B	**Thermal Nala -A**		-		-		-
	Construction Work		-	13%	2,89,120.00	25%	5,56,000.00

S. No.	Description of Items	Milestone-1 (From 26th Nov.'19 to 25th Sep'20)		Achieved against 2nd Milestone		Achieved against 3rd Milestone	
		%	Amount(Rs.)	%	Amount	%	Amount
	Tapping of Nallahs		-		-		-
	Electro-Mechanical work		-		-		-
	Testing		-		-		-
C	**Thermal Nala -B**		-		-		-
	Construction Work		-	14%	3,11,360.00		-
	Tapping of Nallahs		-		-		-
	Electro-Mechanical work		-		-		-
	Testing		-		-		-
23	**Rising Main Works**				-		-
A	**ICI Nala Area**		-		-		-
	Site Clearance from Client		-		-		-
	Supply of Pipes		-		-		-
	Excavation, Laying & backfilling of Pipes		-		-		-
	Testing		-		-		-
B	**Sundar Nagar IPS Area**		-		-		-
	Site Clearance from Client		-		-		-
	Supply of Pipes		-		-		-
	Excavation, Laying & backfilling of Pipes		-		-		-
	Testing		-		-		-
24	**Sewer System Area (RCC Pipes-NP3 Types)**				-		-
	Site Clearance		-		-		-
	Supply of pipes	16%	256,70,093.90	25%	401,13,568.00	20%	320,90,854.40
	Excavation and Laying of pipes including bed preparation & backfilling		-		-		-
	Manholes		-		-		-
	Testing		-		-		-
	Road Restoration work		-		-		-

S. No.	Description of Items	Milestone-1 (From 26th Nov.'19 to 25th Sep'20)		Achieved against 2nd Milestone		Achieved against 3rd Milestone	
		%	Amount(Rs.)	%	Amount	%	Amount
25	**Design ,Supply, Testing & Commissioning of Sewer line (crossing National Highway-2 & Railway Track)**				-		-
	Statutory approvals from Railway & Road dept		-		-		-
	Supply of Carrier & Casing Pipes		-		-		-
	Construction of Pit		-		-		-
	Excavation & Laying of Pipes thru Jack push method		-		-		-
	Testing		-		-		-
26	**Design , Supply, Testing & Commissioning of Treated Effluent line from STP to River Pandu**				-		-
	Site Clearance		-		-		-
	Construction of Effluent line from STP to River Pandu		-		-		-
	Testing		-		-		-
	TRIAL RUN & COMMISSIONING						
	Trial Run & Commissioning						
	Total Amount		**1248,39,750.00**		**1248,39,750.00**		**798,36,516.90**
	Progress in %		**12.5%**		**12.5%**		**7.99%**
	Total Progress till 3rd milestone (out of 37.5%)		**33.0%**				

Note:

i. *3rd milestone (12.5%) completion was due on 25.01.2021 but due to some hindrances in highway road cutting and sewer laying; only 8.0% work could be completed till due date.*

ii. *The Concessionaire was asked to complete the milestone by completing other works of 4th/5th milestones and submit a revised construction plan for the same.*

iii. *Total Progress till 31st January 2021 (including some works of 4th and 5th milestone on 31.01.2021 is 34.34%.*

PHOTOGRAPHS OF PANKHA STP SITE

MPS work

ICI Nalla IPS Raft casting

Boundary Wall work

Sundar Nagar IPS Wall casting

ICI nala IPS shuttering

Sludge Thickener

6.2 MILESTONE WISE ACTIVITIES AND PROGRESS: UNNAO STP

Milestone wise activities and their progress of work for Unnao STP are given in table 6.2.

TABLE 6.2: UNNAO FACILITIES (DISTRICT UNNAO)

Sr. No.	Description of Items	Milestone-1 Achieved (From 11th Oct.'19 to 25th Sept'20)		Milestone-2 achieved (From 25th Sept'20 to 25th Nov'20)		Milestone-3 Achieved (from 25th Nov'20 to 31.01.2021)		
		%	Amount	%	Amount	Target	Achieved	Amount
I	**Design & Drawing & STP & Sewer Laying works**							
1	On approval of BEP	100%	191,34,500.00					
2	On approval of design & drawings for Civil & Sewerage works	25%	47,83,625.00	75%	143,50,875.00			
II	**CONSTRUCTION**							
A	**UNNAO STP (15 MLD)**							
i)	**SBR Basin Area**							
1	Site Clearance	100%	5,00,000.00					
2	Excavation wall footing	100%	22,46,137.60					
3	PCC wall footing	100%	27,46,137.60					
4	RCC Foundation/Raft of wall		-	100%	54,92,275.20			
5	Wall 50% of total upto base slab		-	20%	10,98,455.04	100%	80%	43,93,820.16
6	Walls (balance 50% of upto base slab)		-			100%	100%	54,92,275.20
7	PCC Base Slab		-					
8	RCC Foundation base slab		-					
9	Wall 50% of total lift work		-					
10	Walls (balance 50% of Total Lift work)		-					
11	Walkway/Platform		-					
12	Piping & fitting works		-					
13	Testing /Finishing works		-					

Sr. No.	Description of Items	Milestone-1 Achieved (From 11th Oct.'19 to 25th Sept'20)		Milestone-2 achieved (From 25th Sept'20 to 25th Nov'20)		Milestone-3 Achieved (from 25th Nov'20 to 31.01.2021)		
		%	Amount	%	Amount	Target	Achieved	Amount
ii	**Sludge Thickener Area**							
1	Site Clearance	100%	1,50,000.00					
2	Excavation	100%	3,64,900.80					
3	PCC	50%	2,57,450.40	50%	2,57,450.40			
4	RCC Foundation Wall/base slab		-	50%	3,43,267.20			
5	Wall 50% of total lift work		-	100%	6,86,534.40			
6	Walls (balance 50% of Total Lift work)						50%	1,89,267.10
7	Testing /Finishing works							-
iii	**Supernatant Sump Area**							
1	Site Clearance	100%	1,00,000.00					
2	Excavation	100%	1,14,422.40					
3	PCC	100%	1,14,422.40					
4	RCC Foundation wall/base slab	100%	1,28,844.80					
5	Wall 50% of total lift work		-	100%	1,43,044.80			
6	Walls (balance 50% of Total Lift work)		-					
7	Testing /Finishing works		-			100%	100%	85,800.00
iv	**Chlorination Tank Area**							
1	Site Clearance	100%	1,50,000.00					
2	Excavation	100%	4,22,112.00					
3	PCC	100%	5,72,112.00					
4	RCC Foundation/Raft	100%	9,15,000.00					
5	Wall 50% of total lift work		-	100%	8,58,168.00			
6	Walls (balance 50% of Total Lift work)		-			100%		8,58,168.00
7	Baffle Walls work		-			100%		3,44,336.00

Sr. No.	Description of Items	Milestone-1 Achieved (From 11th Oct.'19 to 25th Sept'20)		Milestone-2 achieved (From 25th Sept'20 to 25th Nov'20)		Milestone-3 Achieved (from 25th Nov'20 to 31.01.2021)		
		%	Amount	%	Amount	Target	Achieved	Amount
8	Testing /Finishing works		-					
v	**Air Blower Room Area**							
1	Site Clearance	100%	2,50,000.00					
2	Excavation	100%	3,43,267.20					
3	PCC	100%	3,43,267.20					
4	RCC Foundation/column footing		-	100%	6,86,534.40			
5	Column & Beam		-	100%	6,29,801.60			
6	RCC Roof Slab		-			100%		
7	Cable Trench Work		-					
8	RCC Ground floor Grade Slab		-					
9	Brick work		-					
10	Plaster		-					
11	Testing/Finishing work		-					
vi	**Staff Quarter Area (G+1)**							
1	Site Clearance	100%	50,000.00					
2	Excavation	100%	71,000.00					
3	PCC	100%	71,000.00					
4	RCC Foundation/column footing	100%	92,000.00					
5	Column & Beam		-	100%	92,000.00			
6	RCC Ground floor Slab		-	100%	92,000.00			
7	RCC 1st floor Slab		-			100%	100%	92,000.00
100	RCC Roof Slab		-				100%	92,000.00
9	Brick work		-					
10	Plaster		-					
11	Plumbing, fixtures , sanitary works, AC work		-					

Sr. No.	Description of Items	Milestone-1 Achieved (From 11th Oct.'19 to 25th Sept'20)		Milestone-2 achieved (From 25th Sept'20 to 25th Nov'20)		Milestone-3 Achieved (from 25th Nov'20 to 31.01.2021)		
		%	Amount	%	Amount	Target	Achieved	Amount
12	Electrification work		-					
13	Finishing works		-					
vii	**Guard Room Area**							
1	Site Clearance	100%	50,000.00					
2	Excavation	100%	82,211.20					
3	PCC	100%	82,211.20					
4	RCC Foundation/column footing	100%	1,14,422.40					
5	Column & Beam	100%	1,14,422.40					
6	RCC Ground floor Slab	100%	1,14,422.40					
7	RCC Roof Slab		-	100%	1,14,422.40			
8	Brick work		-	100%	1,14,422.40			
9	Plaster		-	0%				
10	Plumbing, fixtures		-			100%		-
11	Sanitary works, AC work		-					-
12	Electrification work		-					-
13	Finishing works		-					-
viii	**Chlorination Room Area**							
1	Site Clearance	100%	1,50,000.00					
2	Excavation	100%	4,57,689.60					
3	PCC	50%	2,28,844.80	50%	2,28,844.80			
4	RCC Foundation/Column footing		-	100%	4,57,689.60			
5	Column & Beam		-	100%	4,57,689.60			
6	Ground floor Slab		-	18.31%	1,25,672.96	35%	35%	2,40,287.04
7	Roof Slab		-			100%	50%	2,43,267.20

Sr. No.	Description of Items	Milestone-1 Achieved (From 11th Oct.'19 to 25th Sept'20)		Milestone-2 achieved (From 25th Sept'20 to 25th Nov'20)		Milestone-3 Achieved (from 25th Nov'20 to 31.01.2021)		
		%	Amount	%	Amount	Target	Achieved	Amount
8	Brickwork		-					-
9	Plaster		-					-
10	Testing/Finishing works		-					-
ix	**Admin Bldg Area (G+1)**							
1	Site Clearance		-			100%	100%	-
2	Excavation		-			100%	100%	78,958.70
3	PCC		-			100%	100%	78,958.70
4	Column footings/Foundation		-					-
5	Column & Beam up to First Floor		-					-
6	1st Floor Slab		-					-
7	Column & Beam First Floor to Roof Slab		-					-
8	Roof Slab							
9	Ground Floor Slab							
10	Brickwork							
11	Plaster							
12	Electrification, plumbing, fixtures , sanitary works, AC work							
13	Finishing works							
x	**Sludge Dewatering System Area (Centrifuge Pump House, Sludge sump & Poly dosing tank)**							
1	Site Clearance			100%	1,50,000.00	100%		
2	Excavation					100%	100%	1,84,788.00
3	PCC					100%	100%	1,84,788.00
4	RCC Foundation					100%	100%	3,69,576.00
5	Column & Beam Upto First Floor					100%	100%	3,69,576.00
6	First Floor Slab							-
7	Column & Beam First Floor to Roof Slab							-
8	Roof Slab							-

Sr. No.	Description of Items	Milestone-1 Achieved (From 11th Oct.'19 to 25th Sept'20)		Milestone-2 achieved (From 25th Sept'20 to 25th Nov'20)		Milestone-3 Achieved (from 25th Nov'20 to 31.01.2021)		
		%	Amount	%	Amount	Target	Achieved	Amount
9	Ground floor Slab							-
10	Brickwork							-
11	Plaster							-
12	Piping & fiittings Work							-
13	Testing/Finishing works							-
xi	**Inlet Chamber Area**							
1	Site Clearance		-		1,50,000.00			
2	Excavation & PCC		-			100%	50%	1,04,608.80
3	RCC Foundation/Column footing		-			100%	0%	-
4	Column & Beam		-					-
5	RCC Slab		-					-
6	RCC Wall		-					
7	Testing/Finishing works		-					-
xii	**Manual & Mechanical Fine Bar Screen Chamber Area**							
1	Site Clearance				1,50,000.00			
2	Excavation					100%	100%	1,21,633.60
3	PCC					100%	0%	-
4	RCC Foundation							
5	Column & Beam							
6	RCC Slab							
7	RCC Wall							-
8	Walkway/Platform							
9	Testing/Finishing works							
xiii	**Grit Chamber Area**							
1	Site Clearance				1,50,000.00			

Sr. No.	Description of Items	Milestone-1 Achieved (From 11th Oct.'19 to 25th Sept'20)		Milestone-2 achieved (From 25th Sept'20 to 25th Nov'20)		Milestone-3 Achieved (from 25th Nov'20 to 31.01.2021)		
		%	Amount	%	Amount	Target	Achieved	Amount
2	Excavation					100%	100%	2,23,844.80
3	PCC					100%	0%	-
4	RCC Foundation							
5	Column & Beam							
6	RCC Slab							
7	RCC Wall							-
8	Walkway/Platform							
9	Testing/Finishing works							
xiv	**Parshall Flume Channel Area**							
1	Site Clearance				1,50,000.00			
2	Excavation					100%	100%	2,43,267.20
3	PCC					100%	0%	-
4	RCC Foundation							
5	Column & Beam							
6	RCC Slab							
7	RCC Wall							-
8	Walkway/Platform							
9	Piping & fitting Work							
10	Testing							
xv	**Sludge Storage Platform Area**							
1	Site Clearance			100%	1,00,000.00			
2	Excavation							
3	PCC							
4	Foundation Work							
5	Finishing work							
xvi	**Transformer Yard Area**							

Sr. No.	Description of Items	Milestone-1 Achieved (From 11th Oct.'19 to 25th Sept'20)		Milestone-2 achieved (From 25th Sept'20 to 25th Nov'20)		Milestone-3 Achieved (from 25th Nov'20 to 31.01.2021)		
		%	Amount	%	Amount	Target	Achieved	Amount
1	Site Clearance							
2	Excavation							
3	PCC							
4	Foundation Work							
xvii	**DG Shed Area**							
1	Site Clearance							
2	Excavation							
3	PCC							
4	Foundation Work							
xviii	**EXTERNAL DEVELOPMENT**							
	Boundary Wall with Gate							
1	Site Clearance	100%	-					
2	Excavation	40%	1,33,900.00	50%	1,67,375.00	10%	0%	
3	PCC	40%	2,00,850.00	45%	2,25,956.25	15%	0%	
4	RCC Column footing	40%	2,00,850.00	45%	2,25,956.25	15%	0%	
5	RCC Column & Beam	40%	2,00,850.00	25%	1,25,531.25	35%	20%	1,00,425.00
6	Brickwork	15%	75,318.75	35%	1,75,743.75	50%	20%	1,00,425.00
7	Plaster		-			15%	0%	
8	Retaining wall		-			50%	0%	
9	Finishing Work							
	Earth filling, Internal Roads ,Landscaping							
1	Earth filling, Internal Roads ,Landscaping							
B	**I & D Work**							
(i)	**Approach Channel**							

Sr. No.	Description of Items	Milestone-1 Achieved (From 11th Oct.'19 to 25th Sept'20)		Milestone-2 achieved (From 25th Sept'20 to 25th Nov'20)		Milestone-3 Achieved (from 25th Nov'20 to 31.01.2021)		
		%	Amount	%	Amount	Target	Achieved	Amount
1	Excavation		-					
2	PCC		-					
3	RCC Foundation/Raft		-					
4	wall							
5	Testing/Finishing work							
(ii)	**Inlet Chamber**							
1	Excavation		-					
2	PCC		-					
3	RCC Foundation/Raft		-					
4	wall							
5	Testing/Finishing work							
(iii)	**Screen Channel**							
1	Excavation		-					
2	PCC		-					
3	RCC Foundation/Raft		-					
4	wall		-					-
5	Testing/Finishing work		-					-
(iv)	**Grit Chamber**							
1	Excavation		-					
2	PCC		-					
3	RCC Foundation/Raft		-					
4	wall		-					-
5	Testing/Finishing work		-					-
(v)	**Collection Chamber**							
1	Excavation		-					
2	PCC		-					
3	RCC Foundation/Raft		-					

Sr. No.	Description of Items	Milestone-1 Achieved (From 11th Oct.'19 to 25th Sept'20)		Milestone-2 achieved (From 25th Sept'20 to 25th Nov'20)		Milestone-3 Achieved (from 25th Nov'20 to 31.01.2021)		
		%	Amount	%	Amount	Target	Achieved	Amount
4	wall		-					-
5	Testing/Finishing work		-					-
C	**MPS-40 MLD**							
	Civil Work							
i	**Construction of Raw Sewage Sump**							
1	Site Clearance	100%	5,00,000.00					
2	Excavation		-	30%	4,77,444.00	50%	60%	9,54,888.00
3	PCC		-					
4	RCC Foundation/Raft		-					-
5	Wall 50% of total lift work		-					-
6	Walls (balance 50% of Total Lift work)		-					-
7	Column & Beam		-					-
8	Ground Floor Slab							
9	Testing/Finishing work							
ii	**Construction of Raw Sewage Pump House**							
1	Column & Beam							
2	Roof Slab							
3	Brickwork							
4	Plaster							
iii	**Construction of Inlet Chamber & Screen Channel**							
1	Site Clearance	100%	1,50,000.00					
2	Excavation		-				100%	1,84,837.50
3	PCC		-					
4	RCC Foundation/Raft		-					-
5	Wall 50% of total lift work		-					-
6	Walls (balance 50% of Total Lift work)							-

Sr. No.	Description of Items	Milestone-1 Achieved (From 11th Oct.'19 to 25th Sept'20)		Milestone-2 achieved (From 25th Sept'20 to 25th Nov'20)		Milestone-3 Achieved (from 25th Nov'20 to 31.01.2021)		
		%	Amount	%	Amount	Target	Achieved	Amount
7	Column & Beam							-
8	Ground Floor Slab		-					-
9	Walkway/Platform							
10	Testing/Finishing work							
D	**SEWER SYSTEM AREA (3.2 Km)**							
1	Site Clearance	100%	-					
2	Supply of pipes	20%	110,60,057.85	35%	193,59,095.70	37%	37%	204,65,329.74
3	Excavation and Laying of pipes including bed preparation & backfilling		-			40%	0%	
4	Manholes		-			40%	0%	
5	Flow/Hydraulic Testing					38%	0%	
6	Road restoration work		-			38%	0%	
E	**RISING MAIN PIPING WORK (100 m)**							
1	Site Clearance							
2	Supply of pipes							
3	Cutting, Excavation, Laying of Pipes, backfilling							
4	Testing							
F	**EFFLUENT DISPOSAL SYSTEM**							
1	Site Clearance							
2	Construction of Effluent Channel from Distribution Chamber to Agriculture Land							
3	Construction of Rectangular Channel from STP to Distribution Chamber							

Sr. No.	Description of Items	Milestone-1 Achieved (From 11th Oct.'19 to 25th Sept'20)		Milestone-2 achieved (From 25th Sept'20 to 25th Nov'20)		Milestone-3 Achieved (from 25th Nov'20 to 31.01.2021)		
		%	Amount	%	Amount	Target	Achieved	Amount
4	Construction of Distribution Chamber							
G	**ELECTRO-MECHANICAL WORK**							
i)	**A. DECANTERS**							
	On supply & Installation - Decanter Equipment		-					-
ii)	**B. DIFFUSERS**							
	On supply & Installation - Diffuser		-					-
iii)	**C. RAS & SAS PUMPS**							
	On supply & Installation - RAS Pump, SAS Pump		-					-
iv)	**D. CHAIN PULLEY BLOCK**							
	On supply & Installation - Chain Pulley Block		-					-
v)	**SLUDGE THICKENER MECHANISM**							
	Supply & Installation - Sludge Thickener		-					-
vi)	**AIR BLOWER(PUMP)**							
	A. Supply & Installation - Blower		-					-
	B.Supply & Installation - Hoist Work		-					-
vii)	**CHLORINATION SYSTEM**							
	A.Supply & Installation - Chlorination system(Dosing pumps, chlorinators, Tonnes, Chemicals & Piping work		-					-
	B.Supply & Installation - Chlorine Neutralisation tank							
	C.Supply & Installation - Hoist Work							
viii)	**ADMN BUILDING**							
	A.PMCC work							

Sr. No.	Description of Items	Milestone-1 Achieved (From 11th Oct.'19 to 25th Sept'20)		Milestone-2 achieved (From 25th Sept'20 to 25th Nov'20)		Milestone-3 Achieved (from 25th Nov'20 to 31.01.2021)		
		%	Amount	%	Amount	Target	Achieved	Amount
	Supply & Installation - PMCC work							-
	B.PLC/SCADA WORK							
	Supply & Installation - PLC/SCADA Automation of MPS,STP,D.G set)							
ix)	**CENTRIFUGE UNIT**							
	On supply & Installation -Centrifuge & Feed Pump							-
x)	**A.MECHANICAL & MANUAL FINE SCREEN**							
	On supply & Installation -Fine Screen							
xi)	**D. GRIT MECHANISM**							
	On supply & Installation - Grit Scraper Mechanism							
xii)	**TRANSFORMER**							
	Supply & Installation - Transformer							
xiii)	**DG SET**							
	Supply & Installation - DG							
xiv)	**PUMP HOUSE**							
a.	**Coarse Screen mechanical & manual**							
	(i)Supply & Installation - Screen							
	(ii)Supply & Installation - Hoist							
b.	**GATE, VALVES & INSTRUMENTS**							
	i)Supply & Installation - Gate & Valves(MPS)							
	ii)Supply & Installation - Instruments(like flow meter, Gauges, level, Transmitter)							
xv)	**Gate Work**							
	Supply & Installation - Gate & Valves							-
xvi)	**Pumps**							

Sr. No.	Description of Items	Milestone-1 Achieved (From 11th Oct.'19 to 25th Sept'20)		Milestone-2 achieved (From 25th Sept'20 to 25th Nov'20)		Milestone-3 Achieved (from 25th Nov'20 to 31.01.2021)		
		%	Amount	%	Amount	Target	Achieved	Amount
	Supply & Installation - Pumps & Motors							
xvii)	Testing of E&M Equipment for STP & MPS							
III	**TRIAL RUN & COMMISSIONING**							
1	Trial Run & Commissioning							
	Total Amount		**478,36,250.00**		**478,36,250.00**			**357,97,125.74**
	Total progress in %		**12.5**		**12.5**			**9.35**
	Total Progress till 3rd milestone (out of 37.5%)	**34.35%**						

Note:

i. *3rd milestone (12.5%) completion was due on 25.01.2021 but due to land acquisition issue of proposed I&D works; only 9.35% work could be completed till due date.*

ii. *The Concessionaire was asked to complete the milestone by completing other works of 4th/5th milestones and submit a revised construction plan for the same.*

iii. *Total Progress till 31st January 2021 is 34.35%.*

PHOTOGRAPHS OF UNNAO STP SITE

Supernatant Sump work

Sludge Thickener

Cube test Inspection by AE, UPJN

Curing at Centrifuge Building

Excavation for 1200mm sewer laying work

Staff Quarter

Ongoing work of Sludge Thickener

SBR Concrete work

6.3 WORK PROGRESS AT SHUKLAGANJ STP

- CTE from the UPPCB has been received on 10.07.2020 (Ref No. - 97724/UPPCB/Unnao (UPPCBRO)/CTE/UNNAO/2020 Dated 07/07/2020).
- Unnao site clearance has been done on 18.01.2020.
- Excavation works related to the boundary wall of proposed STP has been started;
- BEP vetting and approval is in progress.

जलनिगम ने शुरू कराया एसटीपी निर्माण

शुक्लगंज | हिन्दुस्तान संवाद

इन्द्रानगर मुन्नू बगिया में करोड़ो की लागत से सीवरेज ट्रीटमेंट प्लांट काफी दिनों से प्रस्तावित था। इधर पैसा पास होने के बावजूद विभागीय लापरवाही के चलते काम शुरु नहीं हो पा रहा था। करीब पन्द्रह दिन पहले काम शुरु कराने गए जलनिगम के अधिकारियों ने वहां से खदेड़ दिया था। गुरुवार को जल निगम के अधिकारी पुलिस फोर्स लेकर पहुंचे। जिसके बाद जमीन का चिन्हांकन हुआ और कार्य शुरु करा दिया गया।

इन्द्रानगर मुन्नू बगिया और अहमद नगर के बीच 3 बीघा 8 बिस्वा जमीन पर एसटीपी बनाया जाना है। अधिग्रहित जमीन पर कुछ लोगों के प्लाट है। वहीं कुछ मकान भी बने हुए है। पालिका प्रशासन ने राजस्व विभाग से सरकारी जमीन नापजोक करके जल निगम के हवाले कर दी। 19 नवम्बर को जल निगम के सहायक अभियंता और अवर अभियंता काम शुरु कराने पहुंचे थे।

टोटल स्टेशन मशीन से दूरी नापते कर्मी।

लेकिन वहां के लोगों ने विरोध करके उन्हे खदेड़ दिया।

गुरुवार को गंगाघाट कोतवाली में तैनात अतिक्ति निरीक्षक कृष्णनंदन तिवारी, जल निगम के प्रोजेक्ट मैनेजर धर्मेन्द्र कुमार, साइड इंजीनियर अशोक खांडवे, एई सुग्रीव सिंह मौके पर पहुंचे। जहां अधिकारियों को देख आस पास के लोगों की भीड़ जमा हो गयी। लोगों ने विरोध करना चाहा। लेकिन पुलिस फोर्स देख विरोध करने का साहस नहीं जुटा सके। जिसके बाद जल निगम ने पालिका कर्मियों की मद्द से चिन्हित भूमि में चूना डलवाकर चिन्हांकन करवाया। वहीं टोटल स्टेशन मशीन से इंजीनियर ने समतलीकरण और दूरी की नाप जोक की।

साहब लेखपाल से पूछकर जमीन

37 करोड़ से मेंटीनेंस और होगी देखरेख

एसटीपी निर्माण में करीब 27.81 करोड़ रुपये खर्च किए जायेंगे। जबकि 3735 करोड़ मेंटीनेंस और देखरेख में खर्च होंगे। प्रोजेक्ट मैनेजर ने बताया कि मेंटीनेंस में अधिक खर्च होता है। पंद्रह साल तक एसटीपी की देखरेख और मरम्मत की जायेगी। कुल लागत 65.16 करोड़ बताई गयी है। गुरुवार से काम शुरू करा दिया गया है।

खरीदी अब सरकारी कैसे: एसटीपी के लिए चिन्हित की गयी जमीन में सीमा सिंह का बाउन्ड्री युक्त प्लाट, सिद्धार्थ तिवारी का मकान, मोहम्मद इस्लाम का भी मकान बना है। यह लोग अधिकारियों से बोले साहब लेखपाल से पूछकर जमीनी खरीदी थी। यह जमीन अब सरकारी कैसे हो गयी। कुछ लोगों ने कोर्ट में केस भी डाल रखा है।

STP work start news

Fencing of the STP site

Geo Tech Survey work

Geo Tech Survey work

7 PRESENT STATUS AND ISSUES OF HAM PROJECT KANPUR

7.1 PANKHA 30 MLD STP FACILITIES

- 1st and 2nd milestone works have been completed on 25.09.2020 and 25.11.2020 respectively.
- 3rd milestone completion date was due on 25.01.2021 but 3rd milestone was not completed due to hindrance in sewer laying and highway road cutting works. Total progress of work up to 3rd milestone is 34.35 % out of 37.5% till 31.01.2021.
- Total 74 nos. of workers are deployed at the site as on 29.01.2021 which are less.
- Raft concreting of I/D work at ICI Nala has been completed.
- Raft casting of IPS at ICI Nala is also completed. 2 lift wall also completed.
- Sunder Nagar IPS raft concreting has been completed, 3 lift wall also completed. IPS Excavation area slope cutting to be done or shoring as per norms shall be provided and soil heaps to be kept away from the excavated pit).
- MPS – 85% of work of wall (50% of total lift work) has been completed
- SBR baffle wall casting is under progress.
- CCT wall casting work is in progress.
- Sludge Thickener raft casting has been done, 2 lift wall also completed.
- 1.9 Km sewer has been laid out of 16.62KM.
- Overall work progress is slow and need to be expedited.
- The Concessionaire shall ensure availability of test reports for construction material and approved drawings along with construction material test lab facility on the site.
- Concessionaire also needs to - “Develop the site, landscaping, arboriculture, and horticulture etc. at the STP Site.” (CA schedule 1, part B, point (d)).
- Access to CCTVs facility established by concessionaire, should also be given to STC.
- Workman insurance policies to be taken by KRMPL (only insurance in the name of M/S Shapoorji has been taken, which is not effective enough).

Detailed progress report as per milestone enclosed as Annexure 01.

7.2 UNNAO 15 MLD STP FACILITIES

- Total 65 nos. of workers are deployed at the site as on 29.01.2021 which are less.
- Total progress of work up 3rd milestone is 34.35 % out of 37.5%. 1st and 2nd milestone works have been completed on 25.09.2020 and 06.12.2020 respectively.
- Works related to I&D were not started due to issue of land acquisition for proposed I&D structure. The matter of land acquisition was discussed with DM, Unnao and the owners of the land. DM office finalized the issue and ordered for land acquisition on 28.01.2021. Payment and other formalities are in process.
- Sewer pipeline laying work will also subsequently be taken up.
- MPS excavation approx 90% completed (out of 16000 cum, 14400 cum completed).
- Staff quarter first floor slab and roof slab in progress.

- Compound wall – approx 60% work of compound work has been completed. Brickwork, plaster, retaining wall works and finishing works are in progress.
- In SBR – out of 5 walls, 2 wall shuttering and casting completed.
- Centrifuge building – Sludge Sump, poly dosing tank, has been completed. Centrifuge pump house RCC wall completed, column and roof slab work in progress. In Centrifuge house, foundation and column up to tie beam completed.
- Sludge thickener – Up to base slab complete. RCC wall and steel binding in progress.
- Supernatant sump – RCC 100% complete. Hydro testing work is in progress.
- CCT – up to base slab completed. Wall steel binding in progress.
- CCT building – 1st floor column in progress.
- Air blower room – roof slab in progress.
- For Guard room, Floor slab casting and Plaster work on 2 outer side walls completed.
- Entrance gates (1 main gate + 1 alternate), Internal roads, staff quarter and labour huts with all basic facilities need to be established by the Concessionaire on urgent basis.
- Number of CCTVs units need to be increased from at present 2 nos. to minimum 4 nos. access to these CCTVs should also be provided to STC.
- Concessionaire needs to - "Develop the site, landscaping, arboriculture, and horticulture etc. At the STP Site." (CA schedule 1, part B, point (d)). The Concessionaire should submit a plan in accordance to the above clause and provide the necessary arrangement for greenery and plantation in the STP area.

Detailed progress report as per milestone enclosed as annexure 02.

7.3 JAJMAU (PHASE – 1) 130 MLD STP AND IPS REHABILITATION

- CTO received on 10.06.2020 which was valid up to 31.12.2020.
- A reminder letter has been sent to UPJN regarding extension of CTO vide STC letter no. 662 dated 22.01.2021.
- **Handover of 130 MLD STP Jajmau Ph-I:**
- As per meeting held on 15.01.2021 at camp office of District Magistrate, Kanpur, it was directed to complete process of taking over 130 & 43 MLD STPs on 24.01.2021 which was shifted to 27.01.2021 and handover has not been done yet due to labour issue.
- KRMPL has submitted GA, datasheet, BOM, Wiring Diagram & QAP of Transformer for 130 MLD STP vide their letter no. 847 dated 06.01.2021 and STC vetted the above said documents and submit our expert's observation vide our letter no. 659 dated 21.01.2021 and requested UPJN to direct KRMPL to re-submit the submittals.
- PE submitted their comments regarding HT VCB Panel for 130 MLD Jajmau vide STC letter no. 655 dated 18.01.2021 and compliance report has been submitted by KRMPL vide their letter no. 873 dated 18.01.2021

7.4 43 MLD JAJMAU PHASE II

- CTO received on 10.08.2020 which was valid up to 31.12.2020.

- A reminder letter has been sent to UPJN regarding extension of CTO vide STC letter no. 662 dated 22.01.2021.
- **Handover of 43 MLD STP Jajmau Ph-II:**
- A joint Inspection held on 02.12.2020 at Jajmau 43 MLD STP Ph-II and concerning IPSs and report has been submitted by KRMPL vide letter no. 854 dated 11.01.2021.
- As per meeting held on 15.01.2021 at camp office of District Magistrate Kanpur, it was directed to complete process of taking over 130 & 43 MLD STPs on 24.01.2021 which was later shifted to 27.01.2021 but handover has not been done till the end of January 2021.

7.5 42 MLD SAJARI STP

42 MLD Sajari facilities were handed over to KRMPL on 29/05/2019 but as per CA schedule handing over date for Sajari Facilities is Effective Date i.e. 11/10/2019. Therefore, ultimate handing over date of Sajari has been treated as effective date i.e. 11.10.2019. Till Dec 2019 KPIs (especially COD) of treated effluent was not under control and KRMPL was asked by NMCG to suggest improvements for COD to be within prescribed limit. KRMPL proposed to add one additional Aeration Tank. Mr. Madhav Kumar NMCG requested Mr. S. Kamaraju, Process Expert STC to visit the Sajari Plant to give his recommendations. Mr. S. Kamaraju Process Expert visited the Sajari Plant on 27-28 Dec 2019 and concluded that the Sajari Plant is designed for all 12 aerators to run without any standby but the plant was being run with 8 aerators only keeping 4 aerators as stand by. All the 12 aerators got functional on 04/01/2020 in the presence of Mr. J. P. Tripathi, O & M Engineer STC. After that it has been observed that since 04/01/2020 all the parameters of treated effluent are within prescribed limits except for the days when parameters of raw sewage are above the prescribed limits for which concessionaire is not responsible. Hence there is no need for any improvement in the plant as suggested by KRMPL.

Commercial Operation Date was declare as 20.06.2020 vide UPJN letter no. 1545/w-20/127 dated 17.06.2020,andagain revised as 11.10.2019 i.e. effective date of the CA by UPJN vide their letter no. 2574/w-20/267 dated 26.09.2020.O&M charges from 11.10.2019 to sept.2020 have been paid to the concessionaire.

Following points are to be addressed by the KRMPL:-

i. **Compliance of Inspection Reports**
   Compliance report of Inspection done on 30.12.2020 and inspection report issued on 05.01.2021 has been submitted by the concessionaire on 16.01.2021. PE & UPJN inspected 42 MLD STP Sajari on 22.01.2021 and issued inspection note on 25.01.2021 (Inspection report attached). Rectification of defects indicated in different inspection reports from the start of the project has not been done by the KRMPL and they are extending dates continuously every month.
ii. **O&M Manual**
   O&M Manual already approved by UP Jal Nigam.
iii. **Insurance Policies**

Even after instructions by ED (Project) NMCG and by SMCG. KRMPL has not submitted Insurance Policies as per article 11.2 except All Risk Industrial Insurance Policy. KRMPL is required to submit all 5 insurance policies as per article 11.2.

iv. **Performance of Plant**

All KPIs are within prescribed limit since 04.01.2020 except the dates when the parameters of raw sewage are beyond prescribed limit for which concessionaire is not responsible. Performance Report of January 2021 enclosed.

v. **Mechanical Screens (Coarse & Fine Screens)**

Auto System of both Mechanical Screens still not repaired.

vi. **Gas Generators**

All 3 no's of Gas Generators installed are not operational since handover date. KRMPL had promised previously to get all the 3 gas generators operational by 30.06.2020. Then extended the date to 30.09.2020 but now the date has been extended to 15/03/2021.

vii. **Joint Sampling and Testing by IIT Kanpur**

It was decided in the meeting of GM GPCU UPJN on 16-12-2019 (MOM issued vide letter no 3847/M-2A/116 dated 18-12-2019) that at least once in a month joint sampling of raw sewage and treated effluent will be done by UPJN and KRMPL and testing to be done by IIT Kanpur. KRMPL has took the sample jointly on 20.01.2021 and sent it for testing. Only testing report from Spectra research Lab ventures (P) Ltd. of the Joint sample taken on 20.12.2020 has been submitted by concessionaire vide their letter no. 858 dated 17.01.2021 (Report Enclosed). Testing reports from NABL accredited Laboratory Spectro Research Lab Ventures (P) Ltd of joint samples taken on 18.08.2020, 15.09.2020, 19.10.2020 and 20.01.2021 has not been received yet.

viii. **Power backup and Online Monitoring System**

DG set for power backup has been made operational by UPJN on 14.07.2020. RTOLMS has been installed but not calibrated.

Outlet Analyser Panel with sensor installed at site and synchronised with RTOLMS.

Inlet flow meter is under maintenance and outlet flow meter installed at site and to be synchronised with RTOLMS and to be calibrated.

ix. **Work plan For Sludge Disposal**

KRMPL had submitted the work plan for sludge disposal but not following it on site.

x. **Submission of Schedule Maintenance Programme**

KRMPL has not done any schedule maintenance works as per approved O&M manual for the first year and submission of schedule maintenance programmes for the next year is still pending from the Concessionaire.

xi. **KPIs Adherence Report**

KPIs Adherence Report for the month of December 2020 has been submitted by PE vide letter no. 670 dated 27.01.2021. Online Analyser report up to January month has been submitted by concessionaire.

7.6 210 MLD BINGAWAN FACILITIES

The schedule date of handover of 210 MLD Bingawan Facilities as per CA was 01/04/2019 but actually could be handed over on 08/07/2019. From handover date itself it was observed and informed from time to time to Concessionaire that the operation and maintenance of the plant was not up to the mark. Commercial Operation Date of Bingawan facility declared by UPJN as 10.08.2020 vide their letter no. 2324/w-37/100 dated 10.09.2020. O&M bill for Bingawan for 1st quarter i.e. from 10th Aug. 2020 to Oct. 2020 has been submitted by KRMPL and it is under process for payment.

Renovation (installation of RTLOMS and rectification of pumps) completion certificate have been issued by UPJN as 10.08.2020 vide their letter no. 2033/w-37/67 dated 18.08.2020 but calibration certificate with witness certificate is yet to be submitted by KRMPL. Out of 2 nos. electro-magnetic flow meters in inlet, 01 no. has been installed at site and it has been synchronised with RTLOMS. It is not calibrated. Need to be provided calibration report. Another 2nd no. electro -magnetic flow meters has not been installed yet.

Following points need to be addressed:-

i. Compliance of Inspection Reports

PE inspected 210 MLD Bingawan STP on 21.10.2020 & 12.11.2020 and issued inspection reports on 23rd October 2020 & 21 November 2020. Compliance reports of inspection reports of 21.10.2020 & 12.11.2020 have not been submitted by KRMPL. Again PE inspected 210 MLD Bingawan STP on 02.01.2021 & 23.01.2021 and issued inspection reports on 19th January 2021 & 29th January 2021. Compliance reports of inspection reports of 02.01.2021 & 23.01.2021 have also not been submitted by KRMPL.

Since 28th January 2020 rectifications of defects indicated in different inspection reports have not been done by the KRMPL and they are extending dates continuously every month. Copy of Inspection reports submitted in the month of January 2021 of Bingawan site is enclosed.

ii. O&M Manual

Revised O&M manual of Bingawan has been approved by UPJN on 24.08.2020.

iii. Insurance Policies

Even after instructions by ED (Project) NMCG and by SMCG, KRMPL has not submitted Insurance Policies as per article 11.2 except All Risk Industrial Insurance Policy. KRMPL is required to submit all 5 insurance policies as per article 11.2.

iv. Cleaning and reactivation of UASB Reactors

All the KPIs are not being met during the month of January. 2021. Out of 16 no's reactors, UASB reactor no. 1, 4 & 8 has been filled for reactivation after cleaning. Reactor no. 2 & 3 has been taken up for cleaning from 4.08.2020 & 20.08.2020 but not completed yet. The present conditions of all the 16 UASB reactors have been explained in detail in the inspection report of inspection done on 23/01/2021 (inspection report issued on 29/01/2021) which clearly indicates that no sludge blanket has been formed in the reactors nos. 1, 4 & 8, cleaned and refilled earlier. Reactors no. 2 & 3 are still open for cleaning since Aug. 2020 and not completed yet. Remaining 11 reactors are filled with sludge but KRMPL is saying that there is no need of cleaning remaining 11 reactors. The Concessionaire is

immediately required to submit the action plan for cleaning and reactivation of remaining UASB reactors and take up the work of cleaning and reactivation on war footing. Performance report of January 2021 enclosed.

v. Belt Filter Press

Out of 3nos. BFP installed in BFP building, 02 nos. are in working condition with 02 nos. trolleys available at site. BFP-1 no. is under repair and at least 2 more trolleys are required. KRMPL had promised to repair 01 no. BFP by 15.10.2020 again extended the date to 31.12. 2020 and all 3 nos. poly dosing pumps installed, 1 no. is not in working condition due to diaphragm portion is fully damaged.

vi. Joint Sampling and Testing by IIT Kanpur

It was decided in the meeting of GM GPCU UPJN on 16-12-2019 (MOM issued vide letter no. 3847/M-2A/116 dated 18-12-2019) that at least once in a month joint sampling of raw sewage and treated effluent will be done by UPJN and KRMPL and testing to be done by IIT Kanpur. KRMPL has taken the sample jointly on 26.01.2021 for testing. Only testing report from Spectra research Lab ventures (P) Ltd. of the Joint sample taken on 18.12.2020 has been submitted by concessionaire vide their letter no. 857 dated 17.01.2021 (Report Enclosed). Testing report from Spectra research Lab ventures (P) Ltd. of the Joint sample taken on 29.09.2020, 16.10.2020 and 26.01.2021 has not been submitted by concessionaire.

vii. Gas Holder

Out of 2 nos. gas holder installed, both are not in working condition & scale indicators also not working. Gas from gas holder is not reaching up to DFG no.2 system is to be repaired. KRMPL had promised to repair gas holders by 10.11.2020 but not rectified yet.

viii. Schedule Maintenance Works for 1st year

Schedule maintenance works as per approved O&M manual were to be started from 1/08/2020, but not started yet.

ix. KPIs Adherence Report

KPIs Adherence Report for the month of December 2020 has been submitted by PE vide letter no. 671 dated 27.01.2021. Online Monitoring Analyser Report up to January month has not been submitted by concessionaire.

8 STATUS OF BEP & OTHER DETAILS

Status of BEPs & other detail are given in following table 6.2:

Table 6.2: BEPs and other details

SN	Particulars	Status	
		Approved	**Pending**
1.	**BEPs (Process, Mechanical & Electrical)**	GA, Data Sheet and QAP of centrifuge, submersible pump and mechanical grid collection system, Unnao- reviewed & recommended for approval on 25.02.20 GA, Data Sheet and QAP of centrifuge, submersible pump and mechanical grid collection system, Pankha- reviewed & recommended for approval on 28.02.20;	Revised GA & RCC design and drawing for CCT and TEPH for 130 MLD STP Jajmau is pending as there was a level mismatch in

		BEP process for 130 MLD Jajamu recommended for approval vide STC letter no. 570 dated 24.10.2020 and same has been approved by UPJN vide letter 2930/w-30/39 dated 27.10.2020 Electrical load list & SLD recommended it for approval vide their letter no.567 dated 22.10.2020	between existing HFD and RCC or GA.
2.	**BEP Structure Design & Drawings**	SBR Rev Structural design drawing, Unnao- recommended for approval on 30.06.20 Guard Room design, Unnao- recommended for approval on 01.04.20 SBR REV-RCC design drawing, Unnao- recommended for approval on 11.04.20 PTU Rev Structural design drawing, Unnao- recommended for approval on 11.04.20 Staff Quarters Revised RCC design of Unnao STP- recommended for approval on 15.04.20 Rev Structure design of Blower Room of Unnao STP- recommended for approval on 16.04.20 ADMIN build drawing, Unnao- recommended for approval on 10.04.20 Sludge thickener & Sludge re-circulation Sump Rev. Structural drawing, Unnao- recommended for approval on 11.04.20 CCT Rev Structure design drawing, Unnao- recommended for approval on 10.04.20 Blower Room Structure drawing and design of Pankha STP- recommended for approval on 30.04.20 Structure drawing of CCT & TEPH, Jajmau- recommendations for approval on 06.03.20 Electrical drawing, Pankha- recommendations for approval on 17.03.20 Structure drawing, Unnao MPS- recommended for approval on 29.02.20 Revised drawing of boundary wall, Unnao- recommended for approval on 29.02.20 CTE for Shuklaganj STP received from UPPCB dated 10.07.2020 GA, data sheet & QAP - Fine screen, coarse screen and belt conveyor for Unnao vetted by letter no. 455 dated 13.08.2020 GA, data sheet & QAP - Centrifuge feed pump Unnao vetted by STC letter no. 463 dated 18.08.2020 GA, data sheet & QAP for Dosing Pump –Unnao Vetted by STC letter no. 482 dated 03.09.2020 BEP (R5) for Shuklaganj STP recommended for approval on	Acquisition of land for I&D works Unnao is under progress; Compliance of comments for Boundary wall is due at KRMPL. Height of Boundary wall of Shuklaganj STP shall be as per CTE received from UPPCB

		24.10.20 Civil GAD for 5 MLD Shuklaganj STP recommended for approval on 27.11.20	
3.	**Construction Plan**	Revised construction plan Pankha-recommended for approval on 18.06.20 & 29.07.20 without extending completion date. Revised construction plan Unnao-recommended for approval by STC letter vide on 441 dated 31.07.2020 without extending completion date	
4.	**Sewer Network/Line Design**	Design and drawings of sewer work Pankha- recommended for approval On 10.02.20 Design and drawings of sewer work Unnao- recommended for approval On 20.02.20	
5.	**ESHS Plan**	ESHS approval-Already vetted by STC. Approved by UPJN on 26.09.19	
6.	**O&M**	Bingawan RTOLMS - Reviewed & found in order. Recommended for approval on 03.12.19/ 19.12.19 with some conditions Level transmitter & flow metre - vetted & approved on 27.12.19 Bingawan O&M manual - approved Sajari O&M manual – Approved 43 MLD Jajmau STP is ready to be handed over to the Concessionaire.	Only All Risk Industrial Insurance Policy has been submitted and remaining policies are not submitted after so many reminders. Comprehensive General Liability Policies submitted by concessionaire is not acceptable. 43 MLD Jajmau STP - UPJN has written to the Concessionaire to deploy adequate staff for operation of the plant immediately

Monthly QA/QC REPORT

FOR

JANUARY 2021

9 PROCEDURES BEING ADOPTED FOR QUALITY ASSURANCE

Quality Assurance / Quality Control for Civil & E & M Works

Quality control is part of quality management. This ensures that anything built will be usable by a client. Quality management measures the quality of a unit against the established standards to determine whether something is up to par. In order to ensure quality, companies use a variety of tests and inspection. Quality control managers work on more than just the material level. Inspectors or quality control officers can test quality at various levels of completion as well. Contractors can use this to ensure their work will pass inspection in the end and avoid expensive rework.

Contractors should always ensure they are using quality materials. This also prevents later rework since they can prove the materials weren't faulty, to begin with. It also can prevent expensive lawsuits due to any issues because of poor quality materials.

The final inspection that contractors and owners can do is at the end of the project. This determines whether the project is usable because it checks the finished product. The main issue with this is that if there are issues with a product or project, it is on the subcontractor to fix the issue. At this level, the repairs are more expensive because usually an entire section must be rebuilt. In order to prevent this, it is important to have some sort of construction quality control plan.

Laboratory Setup: Cube Testing Machine, Sieves, Slump Cone, Weighing Machine etc. relevant equipment's have been setup at all the new sites by the concessionaire.

9.1 QUALITY CONTROL

During progress of work all necessary precautions and quality related actions have been taken, as per the following;

i. Stage Passing Check before start of each stage of works has been ensured and record maintained at all the sites.
ii. Cubes have been prepared for 7 and 28 days test in case of both PCC & RCC as per requirement of IS 456-2000 and record maintained at sites.
iii. Slump Test has been carried out during progress of PCC & RCC works.
iv. Sieve Analysis Register for Fine Aggregates and Coarse Aggregates (for 10mm & 20mm) maintain at all sites.
v. Site Order Books have been maintained at all sites.
vi. Hindrance Registers have been maintained at all sites.

Site Meetings and its Minutes: During every site visit generally site meeting and discussions do take place with concern Project Managers of Concessionaire as part of site observations, discussions and suggestions.

QUALITY ASSURANCE PLAN (CIVIL WORK)

A periodic check carried out by site supervisor/ Project Engineer to ensure quality in the construction. The checks are carried out essentially at the following stages:

i. Start of every new item of work.
ii. Once every week for each relevant item. The Engineer in-charge may also decide to carry out the check at shorter interval.
iii. Apart from above, the supervisors / engineers follow the daily or routine supervision/ inspection/ site visits to ensure strict adherence for quality control measures.

9.2 TEST CONDUCTED AT SITE:

i. Fine Aggregate (Sieve Analysis) Test.
ii. Coarse Aggregate (Sieve Analysis) Test.
iii. Reinforcement Tests.
iv. Mix Design.
v. Slump Cone (Workability) Test.
vi. Cube Tests (Compressive Strength Test).

9.3 QUALITY REGISTERS MAINTAINING AT SITE:

i. Third Party Test Report of Soil.
ii. Fine Aggregate (Sieve Analysis) Test Register/ Reports.
iii. Coarse Aggregate (Sieve Analysis) Test Register / Reports.
iv. Cement test Report Register
v. Third Party Test Report.
vi. Mix Design Report
vii. Slump Cone (Workability) Test Register.
viii. Cube Tests (Compressive Strength Test) Register.

All the above quality control registers are duly maintained at site and inspected time to time.

10 QUALITY ASSURANCE / QUALITY CONTROL

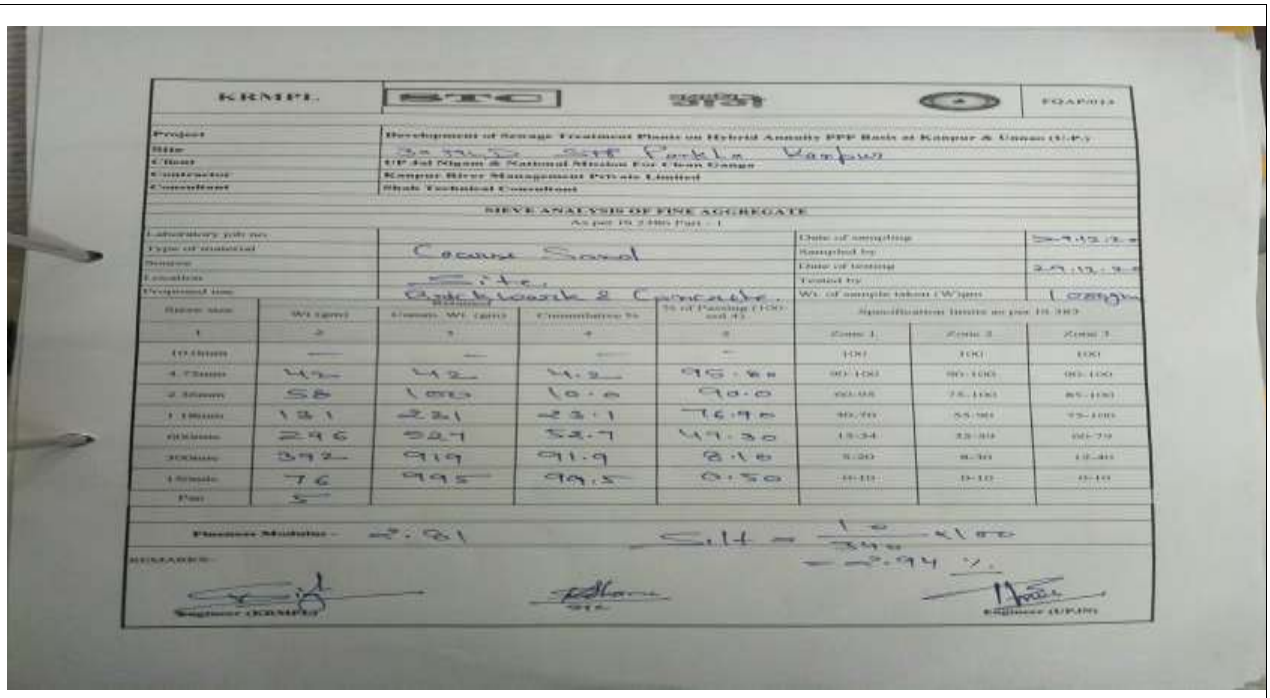
10.1 FOR 30 MLD STP SITE & IPS AT PANKHA KANPUR

Construction Unit (Primary Treatment Unit, SBR, CCT, Sludge Thickener, Blower Room/Panel Room, Staff Quarters, Administrative Buildings etc.)

Sl. No.	Description	Ref. IS Code	Upto Previous Month				During This Month				Remarks
			As per IS No. of Test	No. of Test Conducted	No. of Acceptance	No. of Rejects	As per IS No. of Test	No. of Test Conducted	No. of Acceptance	No. of Rejects	
1	Water	IS 10500 :2012	1	1	1	0	No test required since the source is same				One test has been conducted before taking into use.
2	Mix Design (For M15,M-20,M25, M30, M-30 SRC)	IS 10262 :1986	5	5	5	0	0	0	0	0	This is required at commencement of the project
3	Determining of Safe Load Bearing Capacity of soil/ Sub-Stratum	IS 4968 : 1976 (Cone Penetration) & IS 1888 : 1982 (Plate Load Test)	1	4	4	0	0	0	0	0	This is required once at the stage of designing of the structures.
4	Calibration Test of Compression Testing Machine		One Test after every 12 month	1	1	N.A.	0	0	0	0	This test is required after every 12 months.
5	Cement (OPC)	IS 4031 - 68 / IS 269 : 2015	N.A.	1	1	0	N.A.	1	1	0	
6	Concrete Cubes (15 x15 x15 cm)										
	M 15	IS 456 : 2000	Min.3 cubes	45 sets	45	0					(a set of 3 cubes)
	M-20	IS 456 : 2000		0	0	0		02	02	0	(a set of 3cubes)
	M 25	IS 456 : 2000	Min.3 cubes	106 Sets	106	0	-	06	06	0	(a set of 3 cubes)

	M 30	IS 456 : 2000	Min.3 cubes	72 Sets	72	0		11	11	0	(a set of 3cubes)
	M-30 SRC	IS 456 : 2000		109	109	0		39	39	0	(a set of 3cubes)
.7	Coarse aggregate 20mm	IS 383 : 1970	1 set of test done for change of one quarry	04 samples	03	1		0	0	0	
8	Coarse aggregate 10 mm	IS 383 : 1970	1 set of test done for change of one quarry	04 samples	03	1		1	1	0	
9	Fine Aggregate	IS 383 : 1970	1 set of test done for change of one quarry	11 samples	11	1		2	2	0	
10	Reinforcement Bars	IS 1786 : 2008	1 sample from each lot & size	2	2	0	1 sample from each lot &size	1	1	0	Tested at HBTU, Kanpur
11	Slump Test	IS 1199 - 1959		880	877	03		94	94	0	At Site

Test Report for Coarse Sand and Third Party Lab Test Report for Brick



KRMPL | STC

Project: Development of Sewage Treatment Plants on Hybrid Annuity PPP Basis at Kanpur & Unnao (U.P.)
Site: STP Jajmau & Site Parkha, Kanpur
Client: UP Jal Nigam & National Mission For Clean Ganga
Contractor: Kanpur River Management Private Limited
Consultant: Shah Technical Consultant

SIEVE ANALYSIS OF FINE AGGREGATE
As per IS 2386 Part - I

Laboratory job no.
Type of material: Coarse Sand
Source
Location: Site.
Proposed use: Brickwork & Concrete.

Date of sampling
Sampled by
Date of testing
Tested by
Wt. of sample taken (W) gm: 1 Kg

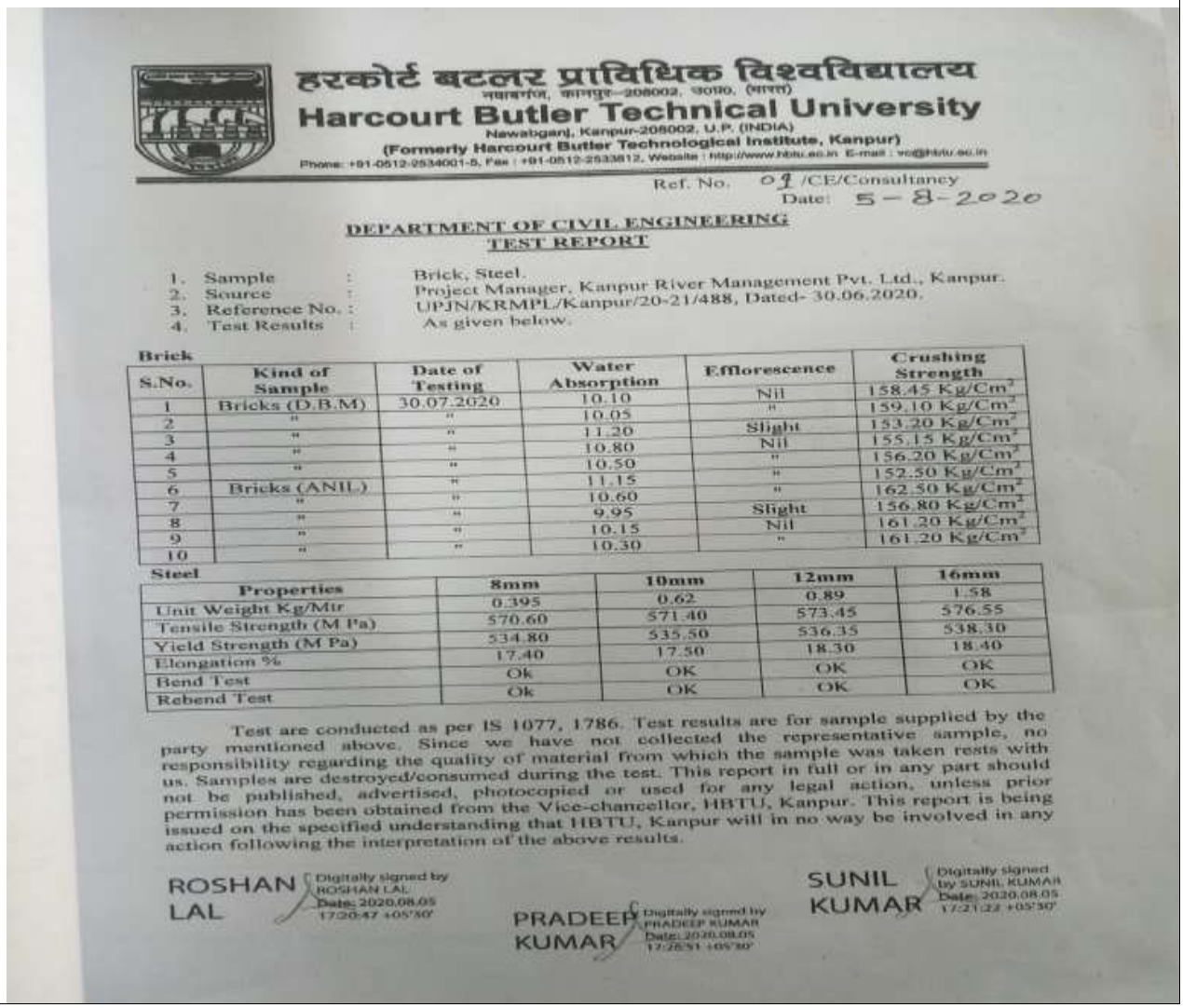
Sieve size	Wt (gm)	Cumm. Wt. (gm)	Cummulative %	% of Passing (100-col 4)	Specification limits as per IS 383 Zone 1	Zone 2	Zone 3
1	2	3	4	5	Zone 1	Zone 2	Zone 3
10.00mm	—	—	—	—	100	100	100
4.75mm	42	42	4.2	95.80	90-100	90-100	90-100
2.36mm	58	100	10.0	90.0	60-95	75-100	85-100
1.18mm	131	231	23.1	76.90	30-70	55-90	75-100
600mic	296	527	52.7	47.30	15-34	35-59	60-79
300mic	392	919	91.9	8.10	5-20	8-30	12-40
150mic	76	995	99.5	0.50	0-10	0-10	0-10
Pan	5						

Fineness Modulus = 2.91

Silt = 10 − 4.06 / 34 = 2.94 %

REMARKS:

Engineer (KRMPL) | Engineer (UPJN)



हरकोर्ट बटलर प्राविधिक विश्वविद्यालय
नवाबगंज, कानपुर–208002, उ0प्र0, (भारत)
Harcourt Butler Technical University
Nawabganj, Kanpur-208002, U.P. (INDIA)
(Formerly Harcourt Butler Technological Institute, Kanpur)
Phone: +91-0512-2534001-5, Fax : +91-0512-2533812, Website : http://www.hbtu.ac.in E-mail : vc@hbtu.ac.in

Ref. No. 09 /CE/Consultancy
Date: 5-8-2020

DEPARTMENT OF CIVIL ENGINEERING
TEST REPORT

1. Sample : Brick, Steel.
2. Source : Project Manager, Kanpur River Management Pvt. Ltd., Kanpur.
3. Reference No. : UPJN/KRMPL/Kanpur/20-21/488, Dated- 30.06.2020.
4. Test Results : As given below.

Brick

S.No.	Kind of Sample	Date of Testing	Water Absorption	Efflorescence	Crushing Strength
1	Bricks (D.B.M)	30.07.2020	10.10	Nil	158.45 Kg/Cm²
2	"	"	10.05	"	159.10 Kg/Cm²
3	"	"	11.20	Slight	153.20 Kg/Cm²
4	"	"	10.80	Nil	155.15 Kg/Cm²
5	"	"	10.50	"	156.20 Kg/Cm²
6	Bricks (ANIL)	"	11.15	"	152.50 Kg/Cm²
7	"	"	10.60	"	162.50 Kg/Cm²
8	"	"	9.95	Slight	156.80 Kg/Cm²
9	"	"	10.15	Nil	161.20 Kg/Cm²
10	"	"	10.30	"	161.20 Kg/Cm²

Steel

Properties	8mm	10mm	12mm	16mm
Unit Weight Kg/Mtr	0.395	0.62	0.89	1.58
Tensile Strength (M Pa)	570.60	571.40	573.45	576.55
Yield Strength (M Pa)	534.80	535.50	536.35	538.30
Elongation %	17.40	17.50	18.30	18.40
Bend Test	Ok	OK	OK	OK
Rebend Test	Ok	OK	OK	OK

Test are conducted as per IS 1077, 1786. Test results are for sample supplied by the party mentioned above. Since we have not collected the representative sample, no responsibility regarding the quality of material from which the sample was taken rests with us. Samples are destroyed/consumed during the test. This report in full or in any part should not be published, advertised, photocopied or used for any legal action, unless prior permission has been obtained from the Vice-chancellor, HBTU, Kanpur. This report is being issued on the specified understanding that HBTU, Kanpur will in no way be involved in any action following the interpretation of the above results.

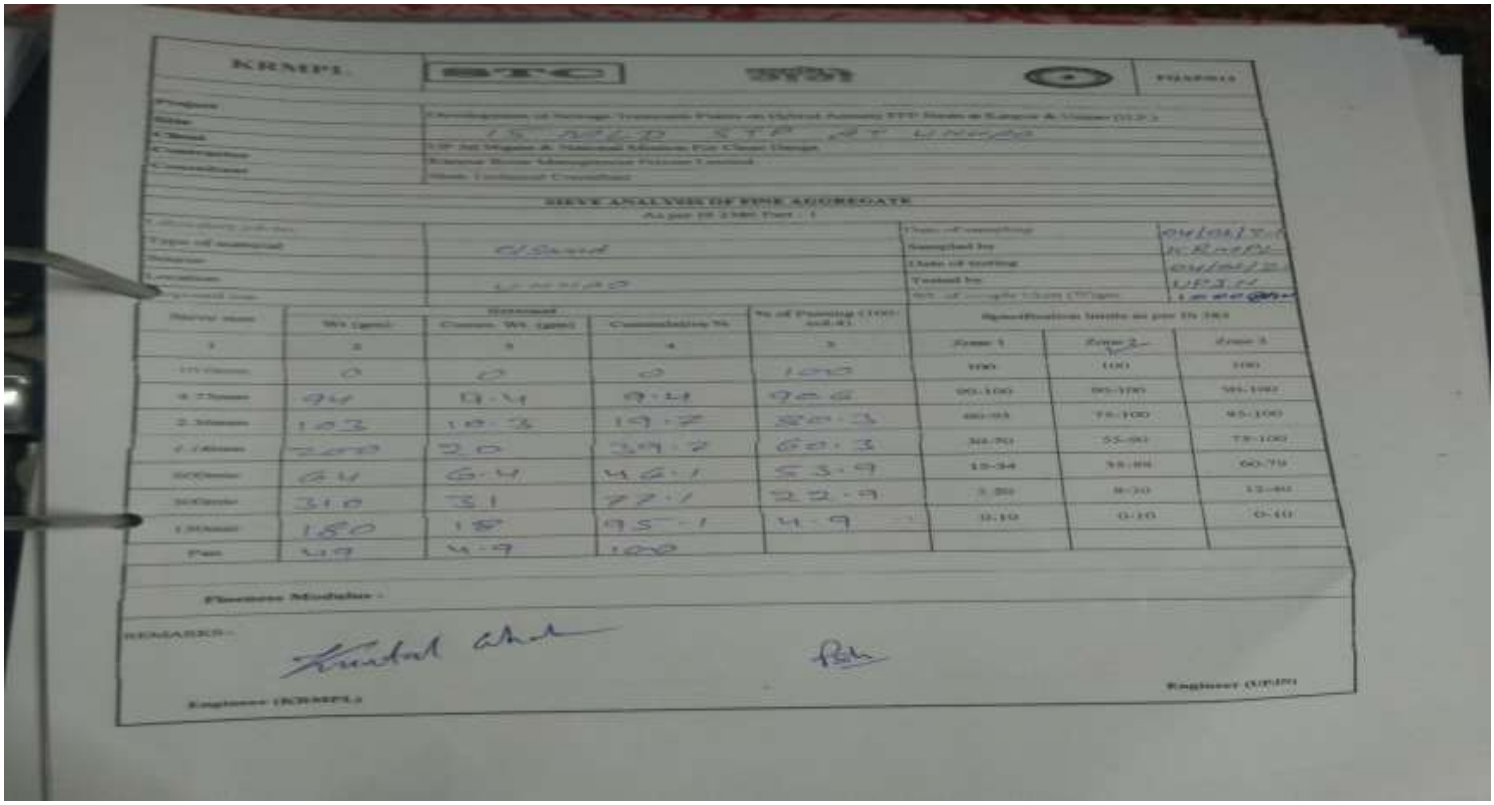
ROSHAN LAL — Digitally signed by ROSHAN LAL Date: 2020.08.05 17:20:47 +05'30'
PRADEEP KUMAR — Digitally signed by PRADEEP KUMAR Date: 2020.08.05 17:28:51 +05'30'
SUNIL KUMAR — Digitally signed by SUNIL KUMAR Date: 2020.08.05 17:21:22 +05'30'

10.2 FOR 15 MLD STP SITE & IPS AT UNNAO

Construction Unit (Primary Treatment Unit, SBR, CCT, Sludge Thickener, Blower Room/Panel Room, Staff Quarters, Administrative Buildings etc.)

Sl. No.	Description	Ref. IS Code	Upto Previous Month				During This Month				Remarks
			As per IS No. of Test	No. of Test Conducted	No. of Acceptance	No. of Rejects	As per IS No. of Test	No. of Test Conducted	No. of Acceptance	No. of Rejects	
1	Water	IS 10500 :2012	1	1	1						
2	Mix Design (For M-20,M25, M30, M-30 SRC)	IS 10262 :1986	4	4	4						
3	Determining of Safe Load Bearing Capacity of soil/ Sub-Stratum	IS 4968 : 1976 (Cone Penetration) & IS 1888 : 1982 (Plate Load Test)	1	1	1						
4	Calibration Test of Compression Testing Machine		1	1	1						
5	Cement	IS 4031 -68 / IS 269 : 2015	2	2	2						
6	Concrete Cubes (15 x15 x15 cm)										
	M 15	IS 456 : 2000		14	14			0	0		
	M-20	IS 456 : 2000		33	33			0	0		
	M 25	IS 456 : 2000		130	130			11	11		
	M 30	IS 456 : 2000		71	71			38	38		
.7	Coarse aggregate 20mm	IS 383 : 1970		10	10			5	5		
8	Coarse aggregate 10 mm	IS 383 : 1970		8	8			4	4		
9	Fine Aggregate	IS 383 : 1970		20	20			7	7		
10	Reinforcement Bars	IS 1786 : 2008		2	2			0	0		
11	Slump Test	IS 1199 - 1959		126	126			20	20		

Photograph of Site Lab Test Report or Third Party Lab Test Report



KRMPL | STC

SIEVE ANALYSIS OF FINE AGGREGATE

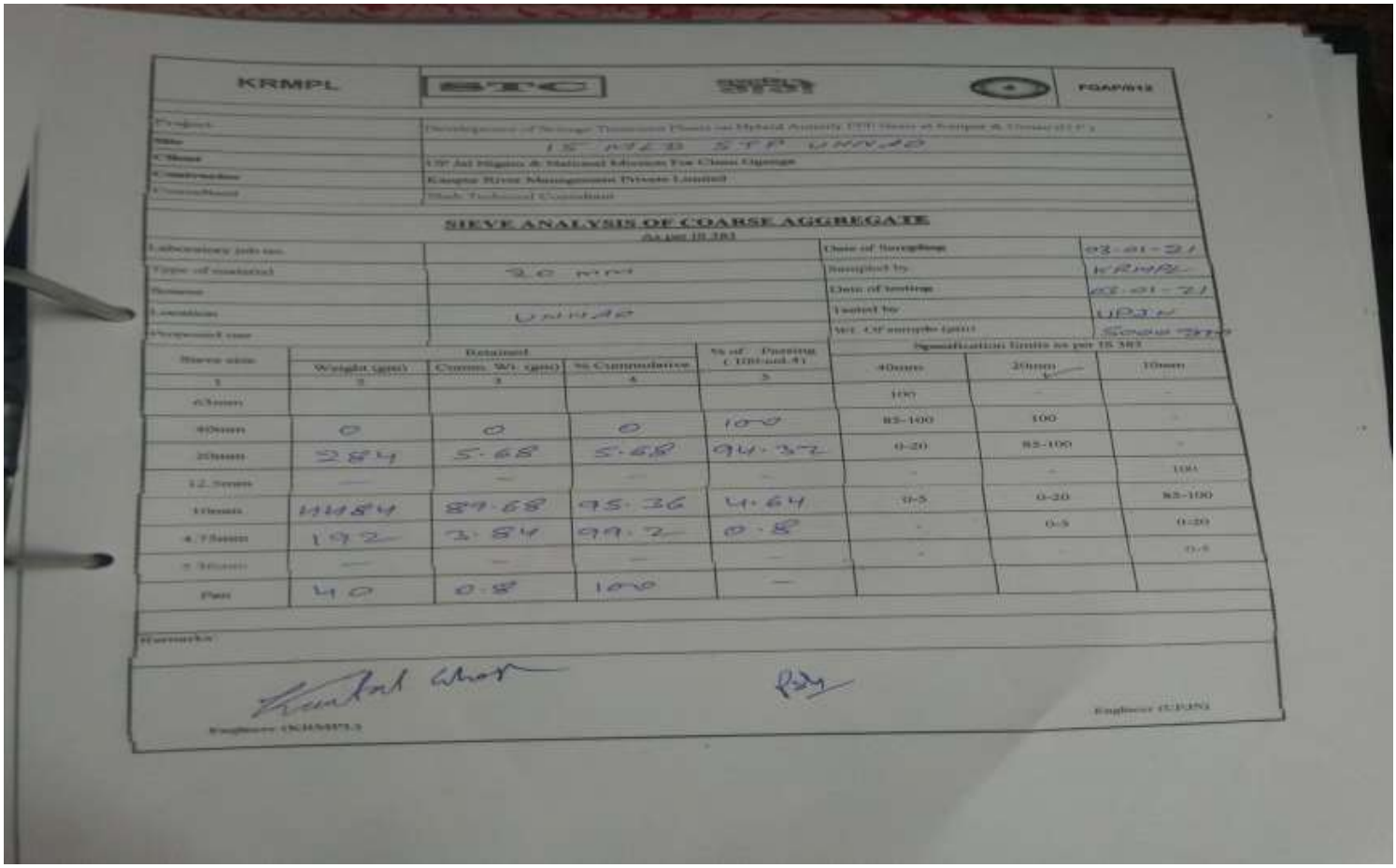
Sieve size	Weight (gm)	Cumm. Wt. (gm)	% Cummulative	% of Passing	Zone 1	Zone 2	Zone 3
1	2	3	4	5			
	0	0	0	100	100	100	100
	94	9.4	9.4	90.6	90-100	90-100	90-100
	103	10.3	19.7	80.3	60-90	75-100	85-100
	200	20	39.7	60.3	30-70	55-90	75-100
	64	6.4	46.1	53.9	15-34	35-59	60-79
	310	31	77.1	22.9	5-20	8-30	12-40
	180	18	95.1	4.9	0-10	0-10	0-10
Pan	49	4.9	100				

Fineness Modulus :

REMARKS :

Engineer (KRMPL)

Engineer (UPJN)



KRMPL | STC

SIEVE ANALYSIS OF COARSE AGGREGATE

Sieve size	Weight (gm)	Cumm. Wt. (gm)	% Cummulative	% of Passing	40mm	20mm	10mm
1	2	3	4	5			
63mm					100	-	-
40mm	0	0	0	100	85-100	100	-
20mm	284	5.68	5.68	94.32	0-20	85-100	-
12.5mm	—	—	—	—	-	-	100
10mm	4484	89.68	95.36	4.64	0-5	0-20	85-100
4.75mm	192	3.84	99.2	0.8	-	0-5	0-20
2.36mm	—	—	—	—	-	-	0-5
Pan	40	0.8	100	—			

Remarks :

Engineer (KRMPL)

Engineer (UPJN)

10.3 FOR 05 MLD STP SITE & IPS AT SHUKLAGANJ

Construction Unit (Primary Treatment Unit, SBR, CCT, Sludge Thickener, Blower Room/Panel Room, Staff Quarters, Administrative Buildings etc.)

Sl. No.	Description	Ref. IS Code	Upto Previous Month				During This Month				Remarks
			As per IS No. of Test	No. of Test Conducted	No. of Acceptance	No. of Rejects	As per IS No. of Test	No. of Test Conducted	No. of Acceptance	No. of Rejects	
1	Water	IS 10500 :2012									
2	Mix Design (For M15,M-20,M25, M30, M-30 SRC)	IS 10262 :1986									
3	Determining of Safe Load Bearing Capacity of soil/ Sub-Stratum	IS 4968 : 1976 (Cone Penetration) & IS 1888 : 1982 (Plate Load Test)	0	0	0	0	1	7	7	0	This is required once at the stage of designing of the structures.
4	Calibration Test of Compression Testing Machine										
5	Cement (OPC)	IS 4031 -68 / IS 269 : 2015									
6	Concrete Cubes (15 x15 x15 cm)										
	M 15	IS 456 : 2000									
	M-20	IS 456 : 2000									
	M 25	IS 456 : 2000									
	M 30	IS 456 : 2000									
	M-30 SRC	IS 456 : 2000									
.7	Coarse aggregate 20mm	IS 383 : 1970									
8	Coarse aggregate 10 mm	IS 383 : 1970									

9	Fine Aggregate	IS 383 : 1970									
10	Reinforcement Bars	IS 1786 : 2008									
11	Slump Test	IS 1199 - 1959									

Third Party (HBTU) Test Result of Geotechnical Investigation Report (Bore Hole)

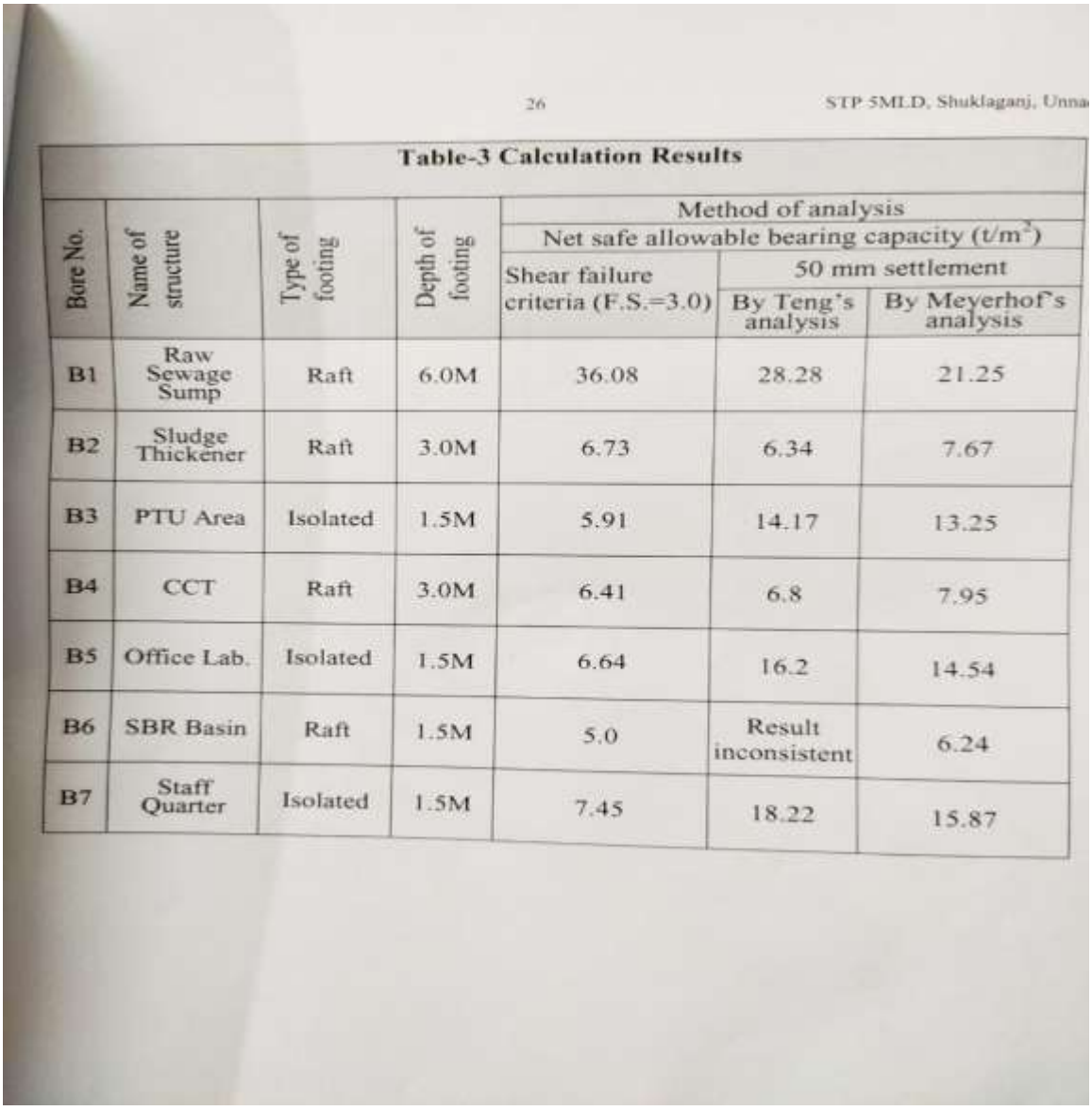


Table-3 Calculation Results

Bore No.	Name of structure	Type of footing	Depth of footing	Method of analysis: Net safe allowable bearing capacity (t/m^2)		
				Shear failure criteria (F.S.=3.0)	50 mm settlement	
					By Teng's analysis	By Meyerhof's analysis
B1	Raw Sewage Sump	Raft	6.0M	36.08	28.28	21.25
B2	Sludge Thickener	Raft	3.0M	6.73	6.34	7.67
B3	PTU Area	Isolated	1.5M	5.91	14.17	13.25
B4	CCT	Raft	3.0M	6.41	6.8	7.95
B5	Office Lab.	Isolated	1.5M	6.64	16.2	14.54
B6	SBR Basin	Raft	1.5M	5.0	Result inconsistent	6.24
B7	Staff Quarter	Isolated	1.5M	7.45	18.22	15.87

11 CONSTRUCTION RUNNING MATERIAL /EQUIPMENTS

Sl. No.	Description	Ref. IS Code	Upto Previous Month				During This Month				Remarks
			As per IS No. of Test	No. of Test Conducted	No. of Acceptance	No. of Rejects	As per IS No. of Test	No. of Test Conducted	No. of Acceptance	No. of Rejects	
1	Cube Testing Machine	IS 516 - 2001	Yearly Once	2	2	0	NA				Not required in this month
2	Laboratory weighing machine	IS460 - 1980	Yearly Once	2	2	0					
3	Ready Mix Concrete Plant	IS 4926-2013	Whenever Required	2	2	0					

ANNEXURE

ANNEXURE 1: Progress of Work – HAM Project Kanpur

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
01.01.2021	Observation on Monthly Activity Report of 42 MLD Sajari facility	15.12.2020 k-804	01.01.2021 s-648	16	20	-	-	JP Tripathi OP Asati Vikas MN Dubey Ajay Goyal Rahul Lokesh MN Dubey	1+1+1+1+1+1+1+1	-	-	-	Advised UPJN to direct KRMPL to resubmit the monthly activity report for Nov.2020.
01.01.2021	Observation on Monthly Activity Report of 210 MLD Bingawan facility	12.12.2020 k-796	01.01.2021 s-649	19	20	-	-	OP Asati JP Tripathi Priyesh Vikas Lokesh Ajay Goyal Rahul MN Dubey	1+1+1+1+1+1+1+1				Advised UPJN to direct KRMPL to resubmit the monthly activity report for Nov.2020.
02.01.2021	Review of Insurance	02.01.2021 K-902	-	-	20	-	-	CM Dimri OP Asati	1+1+1+1+1+1+1+1+1+1				Under Review

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	policy of Pankha & Unnao							JP Tripathi Priyesh Satendra Vikas Ajay Goyal Lokesh Rahul MN Dubey					
03.01.2021	SUNDAY												
04.01.2021	Submission of RCC design for compound wall at 5 ML STP Shuklaganj	12.12.2020 k-803 received on 17.12.2020	04.01.2021 s-651	17	20	-	-	CM Dimri OP Asati Vikas Priyesh Satendra Kapil MN Dubey Ajay Goyal Rahul	1+1+1+1+1+1+1+1+1	-	-	-	Advised UPJN to direct KRMPL to submit the point wise compliance
05.01.2021	Submission of	-	05.01.2021 s-650	-	20	-	-	CM Dimri	1+1+1+1+1+1+1	-	-	-	Advised UPJN to direct

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	inspection report of 42 MLD Sajari facility inspection done on 30.12.2020							JP Tripathi OP Asati Ajay Goyal Kapil Lokesh Rahul					KRMPL to submit compliance report after removing all defects.
05.01.2021	Use of water stopper at each and every construction joint in water retaining structures.	-	05.01.2021s-653	-	20	-	-	CM Dimri OP Asati JP Tripathi Priyesh Satendra Vikas Kapil MN Dubey Ajay Goyal Rahul	1+1+1+1+1+1+1+1+1+1	-	-	-	Requested UPJN to direct KRMPL for ensuring the fulfillment of the requirement.
06.01.2021	Compliance report on inspection carried out	26.12.2020 k-828	06.01.2021 s-652	10	20	-	-	CM Dimri JP Tripathi Priyesh	1+1+1+1+1+1+1+1+1	-	-	-	Requested UPJN to direct KRMPL to get all

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	by STC on 26.11.2020 at 210 MLD Bingawan							Ajay Goyal Vikas Kapil MN Dubey Rahul Lokesh					rectification done before submitting compliance report.
07.01.2021	Preparation and final touch in MPR for the month of July 2020 to December 2020.	-	-	-	-	-	-	CM Dimri JP Tripathi OP Asati Ak Seth Priyesh Satendra Vikas Ajay Goyal Kapil Rahul Lokesh	1+1+1+1+1+1+1+1+1+1+1	-	-	-	Checked and finalized.
08.01.2021	Submission of MPR for the month of July 2020	-	08.01.2021 s-654	-	-	-	-	CM Dimri JP Tripathi OP Asati	1+1+1+1+1+1+1+1+1+1	-	-	-	

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	to Dec. 2020							Priyesh Satendra Vikas Ajay Goyal Rahul Lokesh MN Dubey					
09.01.2021	Second Saturday												
10.01.2021	Sunday												
11.01.2021	Review of Bingawan daily report and other works.	-	-	-	-	-	-	CM Dimri JP Tripathi OP Asati AK Seth Priyesh Satendra Vikas Ajay Goyal	1+1+1+1+1+1+1+1+1+1+1	-	-	-	Review the KPIs of the daily report of Bingawan facility

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								Kapil MN Dubey Rahul					
12.01.2021	Review of Sajari daily report and other works.	-	-	-	-	-	-	CM Dimri JP Tripathi AK seth Priyesh Satendra Vikas Ajay Goyal Kapil MN Dubey Lokesh Rahul	1+1+1+1+1+1+1+1+1+1+1	-	-	-	Review the KPIs of the daily report of Sajari facility
13.01.2021	Regarding Insurances during O&M period for Bingawan and Sajari	k-856 12.12.2021	-	-	20	-	-	CM Dimri JP Tripathi Ak Seth Priyesh Vikas Ajay Goyal	1+1+1+1+1+1+1+1+1+1	-	-	-	Under Review

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								Lokesh Kapil Rahul MN Dubey					
14.01.2021	Regarding the submission of GA, Datasheet, BOM, Wiring diagram & QAP of transformer for 30 MLD, 15 MLD & Jajmau CSPS	11.01.2021 144/w-10/22	-	-	20	-	-	CM Dimri OP Asati Ak seth Priyesh Satendra Vikas Ajay Goyal Rahul Lokesh MN Dubey	1+1+1+1+1+1+1+1+1+1	-	-	-	Under Review
15.01.2021	Progress of the project; Role of Project Engineer	31.12.2020 3456/w-50/143	-	-	20	-	-	CM Dimri JP Tripathi Ak Seth OP Asati Priyesh Satendra	1+1+1+1+1+1+1+1+1+1	-	-	-	Review and reply prepared after point wise discussion

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								Vikas Ajay Goyal Lokesh Rahul MN Dubey					
16.01.2021	Compliance to comments over drawing of HT VCB panel	05.01.2021 104/w-10/13	-	-	20	-	-	CM Dimri JP Tripathi Ak Seth OP Asati Priyesh Satendra Vikas Kapil Lokesh MN Dubey	1+1+1+1+1+1+1+1+1+1	-	-	-	Review and discussed with STC Expert and PM, UPJN
17.01.2021	SUNDAY												
18.01.2021	Compliance to comments over drawing of HT VCB	05.01.2021 104/w-10/13 & k-836 31.12.2021	18.01.2021 s-655	18	20	-	-	CM Dimri JP Tripathi OP Asati Ak Seth Priyesh	1+1+1+1+1+1+1+1+1+1	-	-	-	Comment after review

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	panel							Satendra Vikas Kapil Lokesh MN Dubey Rahul					
18.01.2021	Progress of the project; Role of Project Engineer	31.12.2020 3456/w-50/143	18.01.2021 s-656	18	20	-	-	CM Dimri JP Tripathi Sunil Basutkar Ak seth OP Asati Priyesh Satendra Vikas Kapil Lokesh Rahul MN Dubey	1+1+1+1+1+1+1+1+1+1+1	-	-	-	Letter has been submitted with point-wise reply
19.01.2021	Inspection report of 210 MLD Bingawan facility	-	19.01.2021 s-657	-	20	-	-	JP Tripathi Sunil Basutkar Ajay	1+1+1+1+1+1+1+1+1	-	-	-	Inspection note submitted for inspection done on

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	inspection done on 2.01.2021							OP Asati Satendra Ajay Goyal Kapil Lokesh Rahul MN Dubey					Bingawan dated 02.01.2021
20.01.2021	Submission of Monthly activity report of 42 MLD Sajari and 210 MLD Bingawan facility for the month of Dec.2020	-	20.01.2021s-658	-	20	-	-	CM Dimri JP Tripathi OP Asati AK Seth Priyesh Satendra Ajay Goyal Rahul Kapil Lokesh MN Dubey	1+1+1+1+1+1+1+1+1+1+1	-	-	-	UPJN requested to direct KRMPL to submit the summary report for the month of December 2020.
21.01.2021	Regarding the submission of GA,	144/w-10/22 11.01.2021	21.01.2021 s-659	10	20	-	-	CM Dimri JP Tripathi O.P Asati	1+1+1+1+1+1+1+1+1+1+1	-	-	-	Expert's observations have been submitted

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Datasheet, BOM, Wiring diagram & QAP of transformer for 30 MLD, 15 MLD & Jajmau CSPS							AK Seth Vikas Priyesh Satendra Ajay Goyal Rahul Kapil MN Dubey Lokesh					
21.01.2021	Insurance during O&M period for 210 MLD Bingawan and 42 MLD Sajari facilities	12.01.2021 k-856 received on 18.01.2021	21.01.2021 s-660	9	20	-	-	JP Tripathi Sunil Basutkar OP Asati Ak Seth Priyesh Satendra Ajay Goyal Kapil Lokesh Rahul MN Dubey	1+1+1+1+1+1+1+1+1+1	-	-	-	Requested UPJN to instruct KRMPL to submit the insurance policy as per Article no. 11.2 for CA
21.01.20	Submission	05.01.2021	21.01.2021 s-	15	20	-	-	CM Dimri	1+1+1+1+1+1	-	-	-	Observation

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
21	of RCC design and drawing for compound wall for 5 MLD Shuklaganj	k-843	661					JP Tripathi O.P. Asati AK seth Priyesh Satendra Vikas Kapil Lokesh Ajay Goyal	+1+1+1+1				on boundary wall of Shuklaganj has been submitted
22.01.2021	Renewable of Extension of CTO for 130 & 43 MLD STPs Jajmau	-	22.01.2021 s-662	-	-	-	-	CM Dimri JP Tripathi OP Asati AK Seth Vikas Ajay Goyal Rahul Lokesh	1+1+1+1+1+1+1+1	-	-	-	Reminder letter to UPJN to renew CTO of both 130 & 43 MLD STP Jajmau
22.01.2021	Recommended for approval of GA	18.01.2021 k-875	22.01.2021 s-663	4	20	-	-	CM Dimri Sunil	1+1+1+1+1+1+1	-	-	-	Review and recommendation for approval

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Datasheet along with QAP for agitator for 30 MLD Pankha							Basutkar OP Asati AK Seth Vikas Satendra Rahul Ajay Goyal					
22.01.2021	Submission of Insurance policies for new facilities i.e. 30 MLD Pankha, 15 MLD Unnao & 5 MLD Shuklaganj	-	22.01.2021 s-666	-	20	-	-	JP Tripathi AK Seth Satendra Vikas Ajay Goyal Kapil Lokesh MN Dubey	1+1+1+1+1+1+1+1	-	-	-	Requested to direct KRMPL to obtain relevant Insurance policy for new construction facilities
23.01.2021	Submission of internal illumination drawing for Guard room	21.01.2021 k-882	23.01.2021 s-664	2	20	-	-	CM Dimri JP Tripathi	1+1+1+1+1+1+1+1	-	-	-	Observation has been submit by the Electrical Expert

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	and staff quarter at 30 MLD STP, Pankha.							AK Seth Satendra Vikas Rahul Kapil Lokesh MN Dubey					
23.01.2021	Submission of internal illumination drawing for Guard room and staff quarter at 15 MLD STP, Unnao.	15.01.2021 k-869	23.01.2021 s-665	8	20	-	-	CM Dimri Satendra AK Seth Vikas Rahul Kapil Lokesh MN Dubey	1+1+1+1+1+1+1+1	-	-	-	Observation has been submit by the Electrical Expert
23.01.2021	Schedule rates of the Jal Nigam regarding bedding variation.	-	23.01.2021 s-667	-	20	-	-	CM Dimri JP Tripathi OP Asati AK Seth Priyesh	1+1+1+1+1+1+1+1+1+1	-	-	-	Requested UPJN to furnish the copy of UPJN Schedule of Rates.

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								Ajay Goyal Kapil Lokesh MN Dubey Satendra					
24.01.2021	SUNDAY												
25.01.2021	Observation on submission of revised project schedule for 30 MLD STP Pankha	20.01.2021 k-879	-	-	20	-	-	CM Dimri AK Seth Priyesh Kapil Lokesh MN Dubey Satendra	1+1+1+1+1+1+1	-	-	-	Under review
26.01.2021	Republic day												
27.01.2021	Observation on submission of revised project schedule for 30 MLD STP Pankha	20.01.2021 k-879	27.01.2021 s-668	7	20	-	-	JP Tripathi Priyesh Satendra Vikas	1+1+1+1+1+1	-	-	-	Requested UPJN to direct KRMPL to Submit the Revised schedule plan

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								Kapil Rahul					
27.01.2021	Observation on submission of Revised project schedule for 15 MLD STP Unnao	20.01.2021 k-881	27.01.2021 s-669	7	20	-	-	JP Tripathi Priyesh Satendra Vikas Kapil Rahul	1+1+1+1+1+1	-	-	-	Some observations has been submitted and directed KRMPL to resubmit the revised plan after compliance
27.01.2021	KPIs Adherence report of Sajari of Dec.2020.	17.01.2021 k-858	27.01.2021 s-670	10	20	-	-	JP Tripathi OP Asati Priyesh Vikas Ajay Goyal Kapil Rahul	1+1+1+1+1+1+1	-	-	-	Reviewed the KPIs Adherence report
27.01.20	KPIs	17.01.2021	27.01.2021 s-	10	20	-	-	CM Dimri	1+1+1+1+1+1	-	-	-	Reviewed the

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
21	Adherence report of Bingawan of Dec.2020.	k-857	671					JP Tripathi OP Asati Priyesh Ajay Goyal Rahul Kapil MN Dubey	+1+1				KPIs Adherence report
28.01.2021	Submission of design and drawing- Pankha IPS structures	Email dated 28.01.2021	-	-	20	-	-	CM Dimri OP Asati Priyesh Satendra Kapil Lokesh Preetam	1+1+1+1+1+1+1	-	-	-	Under Review
29.01.2021	Inspection report of 210 MLD Bingawan facilities inspection done on 23.01.2021	-	29.01.2021 s-672	-	20	-	-	CM Dimri JP Tripathi OP Asati Priyesh Ajay Goyal Lokesh	1+1+1+1+1+1+1	-	-	-	Inpsection note submitted for inspection done on 23.01.2021 at Bingawan plant

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								Rahul					
30.01.2021	Submission of RCC design and drawing for Sludge thickener at 5 MLD Shuklaganj **(Reminder Letter)**	12.12.2020 k-803	30.01.2021	-	20	-	-	CM Dimri OP Asati Priyesh Satendra Kapil Lokesh Preetam	1+1+1+1+1+1+1	-	-	-	Reminder letter has been sent in continuation to STC letter no. 643 dated 23.12.2020
30.01.2021	Structure engineer (STC) comments on design and drawing- Pankha IPS structures	Email dated 28.01.2021	30.01.2021 s-674	2	20	-	-	CM Dimri Priyesh Satendra Kapil Lokesh Preetam	1+1+1+1+1+1	-	-	-	Requested to direct KRMPL to submit the compliance of the observation.
30.01.2021	Inspection note on Pankha STP facilities	-	30.01.2021	-	20	-	-	JP Tripathi OP Asati Preetam	1+1+1+1+1+1+1+1	-	-	-	Submitted Inspection note for inspection

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	dated 19th and 20th jan.2021							Priyesh Satendra Kapil MN Dubey Ajay Goyal					done on 19 & 20 Jan. 2021
30.01.2021	Observation on Monthly Activity Report of 42 MLD Sajari Facility for Dec.2020	17.01.2021 k-858	30.01.2021 s-676	13	20	-	-	CM Dimri JP Tripathi OP Asati Satendra Ajay Goyal Rahul Lokesh MN Dubey	1+1+1+1+1+1+1+1	-	-	-	Requested to direct KRMPL to resubmit the monthly activity report for the month of Dec2020
30.01.2021	Observation on Monthly Activity Report of 210 MLD Bingawan Facility for Dec.2020	17.01.2021 k-857	30.01.2021 s-677	13	20	-	-	CM Dimri JP Tripathi OP Asati Priyesh Ajay Goyal Rahul Kapil	1+1+1+1+1+1+1+1+1	-	-	-	Requested to direct KRMPL to resubmit the monthly activity report for the month of Dec2020

Date	Name of Activity	Date of Receipt	Date of Approval (Vet/ Comment)	No. of day taken	Time as per contract (days)	Delay if any (No. of days) [7=6-5]	Reason for delay*	Key Personnel deployed	Man-days of each Key Personnel	Delay by Concessionaire	Reason for delay	Step taken by PE to avoid such delays	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14
								Lokesh MN Dubey					
31.01.2021	SUNDAY												

Note: Man-days and respective inputs of experts for the month of January 2021 are:

SN	Name	Designation	Total Man-days	Input
1.	Mr. Chandra Mauleshwar Dimri	Senior Civil Engineer	31	Timesheet attached
2.	Mr. Jai Prakash Tripathi	O&M Engineer	31	Timesheet attached
3.	Mr. O.P. Asati	O&M Engineer	31	Timesheet attached
4.	Mr. Anil Kumar Seth	Sr. Electrical Engineer	19	Timesheet attached
5.	Mr. Preetam Walunjkar	Structural Expert	04	Timesheet attached
6.	Mr. Sunil Basutkar	Senior Mechanical Engineer	04	Timesheet attached
7.	Mr. Satish Kamaraju	Process Expert	00	-
8.	Mr. Prasoon Bhardwaj	Instrumentation Engineer	00	-

Annexure 2: Timesheets of Experts

Mr. C.M. Dimri (Senior Civil Engineer)

Project Engineer	Shah Technical Consultants Pvt Limited	
NMCG-STP Projects at Kanpur under Hybrid Annuity based PPP Mode		
Daily Report		
Name :	Chandra Mauleshwar Dimri	Month/Year:
Position:	Senior Engineer Civil	Jan-21
Date	Description	Location
1	Discussion on MoM of SMCG meeting Dated 28th Dec '20	Kanpur
2	Visited new office accomodation and discussion with VP about payment condition	Kanpur
3	Sunday	Kanpur
4	Site visit of Pankha STP facilities	Kanpur
5	PM E&M discussion about payment of power bills and electrical drawings of Shukla ganj STP	Kanpur
6	Discussion on MoM of SMCG meeting and performance of Sajari & Bingwan plants.	Kanpur
7	Meeting with CE Kanpur	Kanpur
8	Apraising of Manhole chamber design for different depths	Kanpur
9	Second Saturday	Kanpur
10	(Sunday)	Kanpur
11	Shifting and rearrangement of new office premises	Kanpur
12	Rearrangement of new office	Kanpur
13	Rearrangement of new office,Vehicle not able to move to site due to non availability of funds in STC	Kanpur
14	Discussion with PM III regarding Pankha facilities progress	Kanpur
15	Meeting with CE Kanpur / GM GPCU / PM III UPJN regarding general progress of HAM Kanpur	Kanpur
16	Discussion with Director STC about complain by KRMPL letter no 770 Dated 25.11.2020	Kanpur
17	SUN DAY / Discussion with NMCG about QA/QC reports	Kanpur
18	Third party test reports sent to NMCG and discussion with GM GPCU about complain STC reply no 656.	Kanpur
19	Inspection of Pankha facilities and network near STP	Kanpur
20	Inspection of Pankha facilities and network near STP	Kanpur
21	Recommendation on Unnao MPS r/f curtailment and boundary wall of Shuklaganj	Kanpur
22	Meeting and inspection of Pankha STP by C.E. UPJN Kanpur	Kanpur
23	Review of the progress of Pankha and Unnao facilities regarding 3rd mile stone	Kanpur
24	Sunday	Kanpur
25	Discussion with Mr. Paresh Chutke O&M expert SPCPL on Insurance policies	Kanpur
26	Republic Day	Kanpur
27	Meeting with GM UPJN Kanpur about HAM kanpur progress	Kanpur
28	Email to VP and Director about minimum requirement to run office of STP Kanpur	Kanpur
29	Meeting with PM III GPCU UPJN Kanpur about HAM project progress	Kanpur
30	Review of the Design of MH chamber with expert and Construction plan with concessionaire.	Kanpur
31	Sunday	Kanpur

I hereby certify that the time report above is a true and complete statement of my working time for the payroll period.

Signature of Employee 27/02

Signature of Team Leader 27/02

Mr. J. P. Tripathi (O&M Engineer)

Project Engineer	Shah Techanical Consultants Pvt Limited	
NMCG-STP Projects at Kanpur under Hybrid Annuity based PPP Mode		
Daily Report		
Name :	JAI PRAKASH TRIPATHI	Month/Year:
Position:	O & M ENGINEER	Jan-21
Date	Description	Location
1	Prepared Time sheet and Invoice of Dec 2020	Kanpur
2	Wrote 2 letters to GM GPCU UPJN Kanpur regarding observations on Monthly Activity reports of Sajari and Bingawan for the month of Nov. 2020	Kanpur
3	Sunday	
4	Corrected and updated MPR for the month of Dec 2020	Kanpur
5	Wrote letter to GM GPCU UPJN Kanpur forwading the inspection report of 42 MLD Sajari facilities done on 30/12/2020	Kanpur
6	Wrote letter to GM GPCU UPJN Kanpur rgarding compliance report of the inspection done of 210 MLD Bingawan facilities done on 26/11/2020	Kanpur
7	Corrected and finalized MPR for the month of Dec 2020	Kanpur
8	Wrote letter to GM GPCU UPJN Kanpur forwading the inspection report of 210 MLD Bingawan facilities done on 02/01/2022	Kanpur
9	Second Saturday	
10	Sunday	
11	Office shifting/ work from home	Kanpur
12	Office shifting/ work from home	Kanpur
13	Office shifting/ work from home	Kanpur
14	Prepared reply to KRMPL letter No. 770 dated 25/11/2020	Kanpur
15	Discussed with CE UPJN Kanpur and GM GPCU UPJN kanpur regarding role of PE in HAM Project Kanpur with reference to KRMPL letter No. 770 dated 25/11/2020	Kanpur
16	Prepared reply to KRMPL letter No. 770 dated 25/11/2020	Kanpur
17	Sunday	
18	Discussed with CE UPJN Kanpur and GM GPCU UPJN kanpur regarding HAM Project Kanpur	Kanpur
19	Wrote letter to GM GPCU UPJN Kanpur forwading the inspection report of 210 MLD Bingawan facilities done on 02/01/2021	Kanpur
20	Wrote letter to GM GPCU UPJN Kanpur regarding monthly activity reports of 210 MLD Bingawan and 42 MLD Sajari facilities for the month of Dec. 2020	Kanpur
21	Wrote letter to GM GPCU UPJN Kanpur regarding insurance policies during O & M period for 210 MLD Bingawan and 42 MLD Sajari facilities	Kanpur
22	Site visit of Pankha and Sajari with CE UPJN Kanpur	Kanpur
23	Reveiwed monthly activity report of Sajari Facilities	Kanpur
24	Sunday	
25	Reveiwed monthly activity report ofBingawan Facilities	Kanpur
26	Republic Day	
27	Sent KPIs Adherance reports of Bingawan and Sajari STPs	Kanpur
28	Prepared present status of Ham Project Kanpr for proposed NMCG review meeting on 01/02/2021	Kanpur
29	Wrote letter to GM GPCU UPJN Kanpur forwading the inspection report of 210 MLD Bingawan facilities done on 23/01/2021	Kanpur
30	Wrote 2 letters to GM GPCU UPJN Kanpur regarding obsevations on Activity reports of 210 MLD Bingawan and 42 MLD Sajari facilities submitted by KRMPL	Kanpur
31	Sunday	

I hereby certify that the time report above is a true and complete statement of my working time for the payroll p

Signature of Employee

Signature of Team Leader 27/02

Mr. A. K. Seth (Senior Electrical Engineer)

Project Engineer	Shah Technical Consultants Pvt Limited	
NMCG-STP Projects at Kanpur under Hybrid Annuity based PPP Mode		
Daily Report		
Name : Anil kumar Seth		Month/Year:
Position: Electrical Expert (Sr.)		Jan-21
Date	Description	Location
1		Kanpur
2		Kanpur
3	Sunday	Kanpur
4		Kanpur
5		Kanpur
6		Kanpur
7	Review the progress of disposals of submissions by concessionaire	Kanpur
8	Study of CA regarding specification of transformers & discuss	Kanpur
9	Second Saturday	Kanpur
10	Sunday	Kanpur
11	Review of IP protection for HT panels & discussed with UPJVNL	Kanpur
12	Review of the Panel drawing Tajmau STP	Kanpur
13	Review of the load list of Tajmau STP	Kanpur
14	Review of transformer data sheet – Pankka STP 30MLD	Kanpur
15	Review of transformer data sheet – Unnao STP 15MLD	Kanpur
16	Review of transformer data sheet 2nos for Tajmau STP	Kanpur
17	Sunday	Kanpur
18	Review of Submissions pertaining to transformers – Tajmau.	Kanpur
19	Draft prepared for observations on transformer data sheets	Kanpur
20	Draft letter get signed for observations on transformer data sheets.	Kanpur
21	Final letter prepared for observation on transformers.	Kanpur
22	Review internal wiring of staff quaters & Guard rooms.	Kanpur
23	Review of internal wiring of staff quats & Guard room – observations (Unnao) (Pankka)	Kanpur
24	Sunday	Kanpur
25	Review of pendency of Electrical works update	Kanpur
26	Republic Day	Kanpur
27		Kanpur
28		Kanpur
29		Kanpur
30		Kanpur
31	Sunday	Kanpur

I hereby certify that the time report above is a true and complete statement of my working time for the payroll period.

Signature of Employee

Signature of Team Leader 27/01/2021

Mr. P Walunjkar (Structure Engineer)

Project Engineer	Shah Techanical Consultants Pvt Limited

NMCG-STP Projects at Kanpur under Hybrid Annuity based PPP Mode

Daily Report

Name :	Preetam Walunjkar	Month/Year:
Position:	Senior Structural Engineer	Jan-21
Date	Description	Location
28	Travel Nagaur to Kanpur STC Project	Kanpur
29	Review Pankha ICI Nalla RCC Drg of Boundary Wall	Kanpur
30	Review Pankha ICI Nalla RCC Drg & Guard Room Drg	Kanpur
31	Sunday Holiday	Kanpur

I hereby certify that the time report above is a true and complete statement of my working time for the payroll period.

Walunjkar P.M.

Signature of Employee

27/02/21

Signature of Team Leader

Mr. O.P. Asati (O&M Engineer)

Project Engineer	Shah Technical Consultants Pvt Limited	
NMCG-STP Projects at Kanpur under Hybrid Annuity based PPP Mode		
Daily Report		
Name :	Omprakash Asati	Month/Year:
Position:	Senior Engineer Civil	Jan-21
Date	Description	Location
1	Giving inputs in the Preparation of the MPR for the month of November 2020 of 82 MLD STP Haridwar.	Kanpur
2	Giving inputs in the Preparation of the MPR for the month of November 2020 of 82 MLD STP Haridwar.	Kanpur
3	Sunday	Kanpur
4	Prepare summary note in MPR of Haridwar for Nov. 2020 month as per direction of Dr. Pravin, NMCG.	Kanpur
5	Assist Mr. Vikas in drafting Bingawan & Sajari Note for MPR of HAM Kanpur for the month of Dec 2020.	Kanpur
6	Giving some inputs in modifications in the HAM Kanpur MPR for the month of July - December 2020.	Kanpur
7	Giving some inputs in modifications in the HAM Kanpur MPR for the month of July - December 2020.	Kanpur
8	Inputs in the Operation & maintenance summary note of month Oct 2020 for MPR of 82 MLD Haridwar.	Kanpur
9	Second Saturday	Kanpur
10	Sunday	Kanpur
11	Shifting of Office/Work from Home	Kanpur
12	Shifting of Office/Work from Home	Kanpur
13	Shifting of Office/Work from Home	Kanpur
14	Setting Up New office/Work fromHome	Kanpur
15	Visit UPJN office and discussion with CE & GM regarding the reply of KRMPL letter no.770.	Kanpur
16	Giving inputs in the draft reply of KRMPL letter no. 770 with discussion with TL Dimri ji and Support Engineer Vikas.	Kanpur
17	Sunday	Kanpur
18	Review and giving suggestions in discussion with Electrical Expert regarding comments on HT VCB Panel for all sites.	Kanpur
19	Review the Joint Inspection report, Inspection done by KRMPL & UPJN regarding 43 MLD Jajmau Handover.	Kanpur
20	Review and giving suggestions in discussion with Electrical Expert regarding transformer of Jajmau & other sites.	Kanpur
21	Review and follow up of all pending issues of all sites and discussion with TL Mr. C.M. Dimri ji.	Kanpur
22	Assist in drafting of letter regarding Renewable of CTO for jajmau both 130 & 43 MLD STP.	Kanpur
23	Review of the concessionaire agreement regarding variation clauses and discussion with TL Mr. Dimri ji.	Kanpur
24	Sunday	Kanpur
25	Assist Mr. Vikas Sharma in drafting some points regarding the NMCG consultative workshop on 28.01.2021.	Kanpur
26	Republic Day	Kanpur
27	Visited Jajmau Site for handover of 130 & 43 MLD STP but plan postponed, discussion on QC report of HAM Kanpur for the MPR for the month of January 2021.	Kanpur
28	Assist in drafting letter on behalf of GM, UPJN against the KRMPL letter no. 770 Dated 25.11.2020.	Kanpur
29	Follow up of Visit of 82 MLD STP Haridwar by support Engineer Mr. vikas Sharma.	Kanpur
30	Review and follow up of all pending issues of all sites and discussion with TL Mr. C.M. Dimri ji.	Kanpur
31	Sunday	Kanpur

I hereby certify that the time report above is a true and complete statement of my working time for the payroll period.

27/02/2021

Signature of Employee **Signature of Team Leader**

Mr. L.K. Rao (Safety Expert)

Project Engineer	Shah Technical Consultants Pvt Limited	
NMCG-STP Projects at Kanpur under Hybrid Annuity based PPP Mode		
Daily Report		
Name :	Linga Krishna Rao	Month/Year:
Position:	Safety Expert	Feb-21
Date	Description	Location
2	Office work attended, Review of pending works related to Pankha, Unnao, Shuklagung, Sajari, Bingawan and Jajmau plants.	Kanpur
3	Office work attended, Review of Project EHS (Environmental, Health and Safety) Plan of Bingawan 210 MLD (O&M) Plant.	Kanpur
4	Office work attended, Reviewd the last month correspondence received from KRMPL.	Kanpur
5	Office work attended, Review of Ref: UPJN/KRMPL/Kanpur/2020-21/852 Date: 11th January, 2021 and Reply sent ot UPJN,NMCG and KRMPL.	Kanpur
6	Office work attended, Review of Environmental and Scocial Impact Assessment (ESIA) Report of construction projects Panka, Unnao and Shuklagunj & O&M	Kanpur
7	**SUNDAY**	Kanpur
8	Office work attended, Panka 30 MLD Project site inspection along with civil support engineers Mr.Satendra kumar sharma & Mr.Dubey.	Kanpur
9	Office work attended, Unnao 15 MLD Project site inspection along with TL & Structural Engineer	Kanpur
10	Office work attended, Unnao 15 MLD Project inspection report prepared and sent to the concerned NMCG,UPJN and KRMPL personnel.	Kanpur
11	Office work attended, Pankha 30 MLD Project inspection report prepared and sent to the concer5ned NMCG,UPJN and KRMPL personnel	Kanpur
12	Office work attended, Review of Project EHS (Environmental, Health and Safety) Plan of Unnao 15 MLD Construction site.	Kanpur
13	**Second Saturday**	Kanpur
14	**SUNDAY**	Kanpur
15	Office work attended, Bingawan 210 MLD O&M Plant inspection done along with Support Engineers Mr.Khandelwale, Mr.Ajit Goyal and Mr.Rohit.	Kanpur
16	Office work attended, Bingawan 210 MLD O&M Plant inspection report prepared along with Support Engineers and sent to the concerned NMCG, UPJN and KRMPL.	Kanpur
17	Office work attended, Unnao 15 MLD Project site inspection along with TL & Support Engineers Mr.Priyesh Shukla and Mr.Kapil Bansil.	Kanpur
18	Office work attended, Unnao 15 MLD Project inspection report prepared and sent to the concerned NMCG,UPJN and KRMPL personnel.	Kanpur
19	Office work attended, Bingawan 210 MLD Project inspection report purpose visited along with Mr.Tripati (STC), Mr.Ajay Goyal (STC) & CE (UPJN), GM (UPJN), PM 1 & 2 (UPJN) and UPJN field staff. Due to non availability of KRMPL Representatives the inspection is not accepted by CE-UPJN. As advised by CE(UPJN) we have joined for meeting in the office of the CE-UPJN.	Kanpur
20	Office work attended, Review of Project EHS (Environmental, Health and Safety) Plan of Sajari 42 MLD O&M Plant.	Kanpur
21	**SUNDAY**	Kanpur
22	Office work attended, Review of Project ESHS (Environmental, Safety and Health System) Plan of BINGAWAN 210 MLD (O&M)	Kanpur
23	Office work attended, Sajari 42 MLD O&M Plant inspection done along with Support Engineers Mr.Ajay Goyal and Mr.Rohit. Support Engineers Mr.Ajay Goyal and Mr.Rohit.	Kanpur
24	Office work attended, Sajari 42 MLD O&M Plant inspection report prepared along with along with Support Engineers Mr.Ajay Goyal and Mr.Rohit and sent to the concerned NMCG, UPJN and KRMPL.	Kanpur
25	Office work attended, All paper work and pending works related to inspections and correspondence done during these days done and time sheet prepared for the month of February, 2021.	Kanpur

Signature of Employee

Signature of Team Leader 27/02/21

Mr. Sunil Basutkar (Senior Mechanical Engineer)

Project Engineer	Shah Techanical Consultants Pvt Limited	
NMCG-STP Projects at Kanpur under Hybrid Annuity based PPP Mode		
Daily Report		
Name :	Sunil Basutkar	Month/Year:
Position:	Mechanical Expert	Jan-21
Date	Description	Location
1		
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15		
16		
17		
18	Review of Mechanical submittals of 30 MLD STP PANKHA project	Pune*
19	Review of Mechanical submittals of 30 MLD STP PANKHA project	Pune*
20		
21	Review of Mechanical submittals of 15 MLD STP UNNAO project	Pune*
22	Review of Mechanical submittals of 15 MLD STP UNNAO project	Pune*
23		
24		
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31		

I hereby certify that the time report above is a true and complete statement of my working time for

Signature of Employee

Signature of Team Leader 17/03/21

Note - * Home Office Input

Annexure 3: Monthly Performance Report of Sajari for Jan. 2021

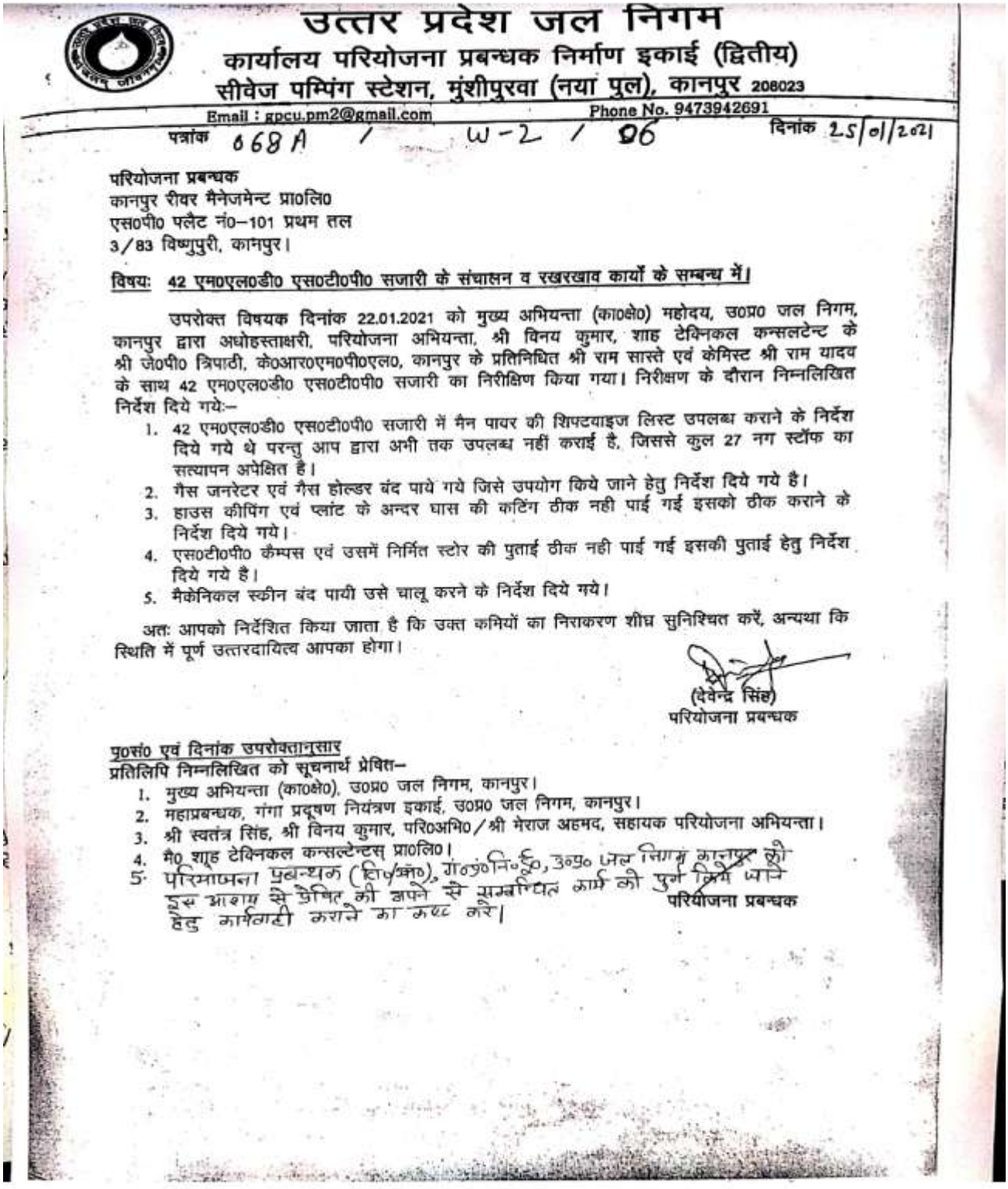
42 MLD SEWAGE TREATMENT PLANT, SAJARI,KANPUR
MONTHLY FLOW & LAB REPORT

Month: Jan. 2021

Date	INLET FLOW in MLD	Plant Run in HRS	RAW SEWAGE						FINAL OUTLET						Aeration	POWER SHUTDOWN		REMARK
			Temp	TDS	PH (7-8)	COD (450 mg/l)	BOD (250 mg/l)	TSS (600 mg/l)	Temp	TDS	PH (7-8)	COD (<180mg/l)	BOD (<30mg/l)	TSS (<50mg/l)	DO	HRS	MINS	
			°C	ppm		ppm	ppm	ppm	°C	ppm		ppm	ppm	ppm	ppm			
1-Jan	25.25	24.00	24	1446	7.6	392	165	311	24	902	7.9	96	22	29	1.3			2 STREAM IS UNDER OPERATION
2-Jan	23.27	23.50	24	1403	7.5	408	168	305	24	915	7.9	92	23	31.0	1.5			2 STREAM IS UNDER OPERATION
3-Jan	23.76	24.00	24	1390	7.5	440	155	318	24	908	7.9	88	21	33	1.7			2 STREAM IS UNDER OPERATION
4-Jan	24.01	24.00	24	1382	7.5	416	160	294	24	887	7.9	96	23	35.0	1.5			2 STREAM IS UNDER OPERATION
5-Jan	23.93	24.00	24	1290	7.5	384	152	278	24	878	7.9	88	22	32	1.7			2 STREAM IS UNDER OPERATION
6-Jan	23.76	24.00	24	1314	7.5	432	158	294	24	834	7.9	92	23	30	1.6			2 STREAM IS UNDER OPERATION
7-Jan	23.27	23.50	24	1302	7.5	394	150	273	24	826	7.9	88	21	28	1.8			2 STREAM IS UNDER OPERATION
8-Jan	21.12	21.33	24	1390	7.5	488	144	315	24	891	7.9	104	23	31	1.5	20	10	2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage
9-Jan	20.46	20.67	24	1410	7.5	544	135	321	24	929	7.5	110	26	34	1.9	18	5	2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage
10-Jan	22.42	22.65	24	1418	7.5	552	178	315	24	935	7.9	112	24	36	1.5			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage
11-Jan	24.26	24.00	24	1394	7.5	528	170	305	24	910	7.9	104	22	31	1.7			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage
12-Jan	23.27	23.50	24	1280	7.5	416	162	294	24	890	7.9	96	21	29	1.5			2 STREAM IS UNDER OPERATION
13-Jan	22.85	23.08	24	1492	7.5	540	175	316	24	905	7.9	104	23	32	1.3	1		2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage
14-Jan	23.27	23.50	24	1486	7.5	608	182	323	24	902	7.9	112	25	36	1.4			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage
15-Jan	23.02	23.25	24	1379	7.5	448	156	298	24	884	7.9	96	22	31	1.5			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage
16-Jan	23.18	23.42	24	1386	7.5	408	165	276	24	895	7.9	92	24	34	1.4			2 STREAM IS UNDER OPERATION
17-Jan	23.27	23.50	24	1480	7.5	544	172	319	24	910	7.9	104	23	36	1.3			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage
18-Jan	23.76	24.00	24	1496	7.5	608	172	325	24	928	7.9	112	25	34	1.6			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage
19-Jan	23.93	24.17	24	1360	7.5	416	160	297	24	886	7.9	96	22	31	1.3			2 STREAM IS UNDER OPERATION
20-Jan	23.76	24.00	24	1310	7.5	384	145	276	24	831	7.9	88	21	29	1.8			2 STREAM IS UNDER OPERATION
21-Jan	23.27	23.50	24	1428	7.5	580	172	311	24	916	7.9	104	23	35	1.5		30	2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage
22-Jan	23.51	23.75	24	1360	7.5	448	165	296	24	887	7.9	96	24	31	1.7		45	2 STREAM IS UNDER OPERATION
23-Jan	22.77	23.00	24	1410	7.5	392	176	311	24	895	7.9	104	26	34	1.3		30	2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage
24-Jan	23.27	23.50	24	1391	7.5	416	155	283	24	812	7.9	92	23	32	1.5			2 STREAM IS UNDER OPERATION
25-Jan	22.10	22.32	24	1405	7.6	592	162	310	24	846	7.9	104	22	35	1.7			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage
26-Jan	22.28	22.50	24	1418	7.6	608	175	322	24	910	7.9	112	25	34	1.5			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage
27-Jan	21.20	21.42	24	1396	7.6	576	168	310	24	896	7.9	104	23	32	1.6			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage
28-Jan	20.54	20.75	24	1352	7.6	432	156	294	24	823	7.9	96	21	29	1.5			2 STREAM IS UNDER OPERATION
29-Jan	21.04	21.25	23	1396	7.5	394	148	305	24	819	7.9	92	22	31	1.6			2 STREAM IS UNDER OPERATION
30-Jan	20.30	20.50	23	1410	7.6	512	165	297	23	930	7.9	104	24	31	1.2			2 STREAM IS UNDER OPERATION Found Dye color in Raw Sewage
31-Jan	19.97	20.17	23	1346	7.5	416	152	283	23	846	7.9	96	23	32	1.5			2 STREAM IS UNDER OPERATION
TOTAL	706.00															41	0	
AVG	22.77	22.93	23.90	1,391.23	7.52	480.52	161.87	303.03	23.94	885.32	7.90	99.16	22.97	32.19	1.5			

Note : There is ingress of Industrial Waste water [coloured] at STP from Sarigawan area, which was experienced on dates of 8,9,10,11,13,14,17,18,21,23,24,25,26,27,30 Jan. 2021.

Annexure 4: Site Inspection Report for the Month of Jan. 2021 (Sajari)



उत्तर प्रदेश जल निगम

कार्यालय परियोजना प्रबन्धक निर्माण इकाई (द्वितीय)
सीवेज पम्पिंग स्टेशन, मुंशीपुरवा (नया पुल), कानपुर 208023

Email : gpcu.pm2@gmail.com Phone No. 9473942691

पत्रांक 668A / W-2 / 96 दिनांक 25/01/2021

परियोजना प्रबन्धक
कानपुर रीवर मैनेजमेन्ट प्रा0लि0
एस0पी0 फ्लैट नं0–101 प्रथम तल
3/83 विष्णुपुरी, कानपुर।

विषयः 42 एम0एल0डी0 एस0टी0पी0 सजारी के संचालन व रखरखाव कार्यों के सम्बन्ध में।

उपरोक्त विषयक दिनांक 22.01.2021 को मुख्य अभियन्ता (का0क्षे0) महोदय, उ0प्र0 जल निगम, कानपुर द्वारा अधोहस्ताक्षरी, परियोजना अभियन्ता, श्री विनय कुमार, शाह टेक्निकल कन्सलटेन्ट के श्री जे0पी0 त्रिपाठी, के0आर0एम0पी0एल0, कानपुर के प्रतिनिधित श्री राम सास्ते एवं केमिस्ट श्री राम यादव के साथ 42 एम0एल0डी0 एस0टी0पी0 सजारी का निरीक्षिण किया गया। निरीक्षण के दौरान निम्नलिखित निर्देश दिये गयेः–

1. 42 एम0एल0डी0 एस0टी0पी0 सजारी में मैन पावर की शिफ्टवाइज लिस्ट उपलब्ध कराने के निर्देश दिये गये थे परन्तु आप द्वारा अभी तक उपलब्ध नहीं कराई है, जिससे कुल 27 नग स्टॉफ का सत्यापन अपेक्षित है।
2. गैस जनरेटर एवं गैस होल्डर बंद पाये गये जिसे उपयोग किये जाने हेतु निर्देश दिये गये है।
3. हाउस कीपिंग एवं प्लांट के अन्दर घास की कटिंग ठीक नही पाई गई इसको ठीक कराने के निर्देश दिये गये।
4. एस0टी0पी0 कैम्पस एवं उसमें निर्मित स्टोर की पुताई ठीक नही पाई गई इसकी पुताई हेतु निर्देश दिये गये है।
5. मैकेनिकल स्क्रीन बंद पायी उसे चालू करने के निर्देश दिये गये।

अतः आपको निर्देशित किया जाता है कि उक्त कमियों का निराकरण शीघ्र सुनिश्चित करें, अन्यथा कि स्थिति में पूर्ण उत्तरदायित्व आपका होगा।

(देवेन्द्र सिंह)
परियोजना प्रबन्धक

पृ0सं0 एवं दिनांक उपरोक्तानुसार
प्रतिलिपि निम्नलिखित को सूचनार्थ प्रेषित–

1. मुख्य अभियन्ता (का0क्षे0), उ0प्र0 जल निगम, कानपुर।
2. महाप्रबन्धक, गंगा प्रदूषण नियंत्रण इकाई, उ0प्र0 जल निगम, कानपुर।
3. श्री स्वतंत्र सिंह, श्री विनय कुमार, परि0अभि0/श्री भैराज अहमद, सहायक परियोजना अभियन्ता।
4. मै0 शाह टेक्निकल कन्सल्टेन्ट्स प्रा0लि0।
5. परियोजना प्रबन्धक (टी/प्रा0), रा0ज0नि0ई0, उ0प्र0 जल निगम कानपुर को इस आशय से प्रेषित की आपने से सम्बन्धित कार्य को पूर्ण किये जाने हेतु कार्यवाही कराने का कष्ट करें।

परियोजना प्रबन्धक

Annexure 5: Test Result of Joint Sampling Report of Treated Effluent (Sajari)

Format No SRL/TRF/GEN
Page 1 of 2

SPECTRO®
Research Lab Ventures (P) Ltd.
CIN:U73200DL2006PTC355036

TEST REPORT

Test Report Issued To

KANPUR RIVER MANAGEMENT PVT. LTD.

SHAPOORJI PALLONJI AND CO. PVT. LTD., U.P. JAL NIGAM,
BENAJHABAR ROAD,
KANPUR, UTTAR PRADESH - 208002,
INDIA

Test Report No: K210104011/K210104011-11
Date of Issue: 11-Jan-2021

Sample Booking/Receipt Date: 04-Jan-2021
Date of Start of Testing: 04-Jan-2021
Date of Completion of Test: 09-Jan-2021

Customer Relationship Number 56524

Sample Description :
SAJARI TREATED SEWAGE

Customer Reference No
KRMPL/20-21/SPECTRO/DEC 20-1 DATED - 19.12.2020

Kind Attention : MR. AMIT BHARAMBE
E-Mail: amit.bharambe@shapoorji.com Contact No: 9833373179

Sample Condition : AS PER RECEIVED
Sample Quantity (Approx) : 1 Sample Size (Approx) :

SAMPLE NOT DRAWN BY OUR LABORATORY THE RESULTS RELATE ONLY TO THE ITEMS TESTED

SEARCH LAB VENTURES
Digitally signed by SANJEET KUMAR MISHRA
Date: 2021.01.11 16:[illegible] +05:30
Report Issued By

ULR-TC784521000000408F
Authenticity of report can be verified by mail at verification@spectrolab.in
This is a Digitally Signed Report and hence doesn't require Physical Signature

Spectro Research Lab Ventures (P) Ltd., D-3, Rajrang Bali Industrial Area, Near Panki Site-IV, Kanpur-208020(India)
Phone +91-9235503984/85 || Web: www.spectroresearchlabs.com|| Email: kan@spectro.in
ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 Certified Laboratory
Please refer to our Website http://www.spectro.in/spectro-policies.html for Terms & Condition

SPECTRO
Research Lab Ventures (P) Ltd.
CIN:U73200DL2006PTC355036

TEST REPORT

Format No: SRL/TRF/GEN
Issue No: 01, Issue Date: 01.04.17

Report No. K210104011/K210104011-11

ID- K210104011-1

Date of start of testing: 04.01.2021
Date of completion of testing: 09.01.2021

Sl. No.	Test Parameter	Observed Value	Test Method
1.	Total Suspended Solids, mg/l	36	IS:3025(P-15)-1984 (RA-2019)
2.	C.O.D, mg/l	83	IS:3025(P-58)-2006 (RA-2017)
3.	B.O.D (5 days) at 20°C, mg/l	25	APHA 5210-B (23rd Edition): 2017

******End of report******

– End of Test Report –

ULR-TC784521000000408F

Analyst Signature

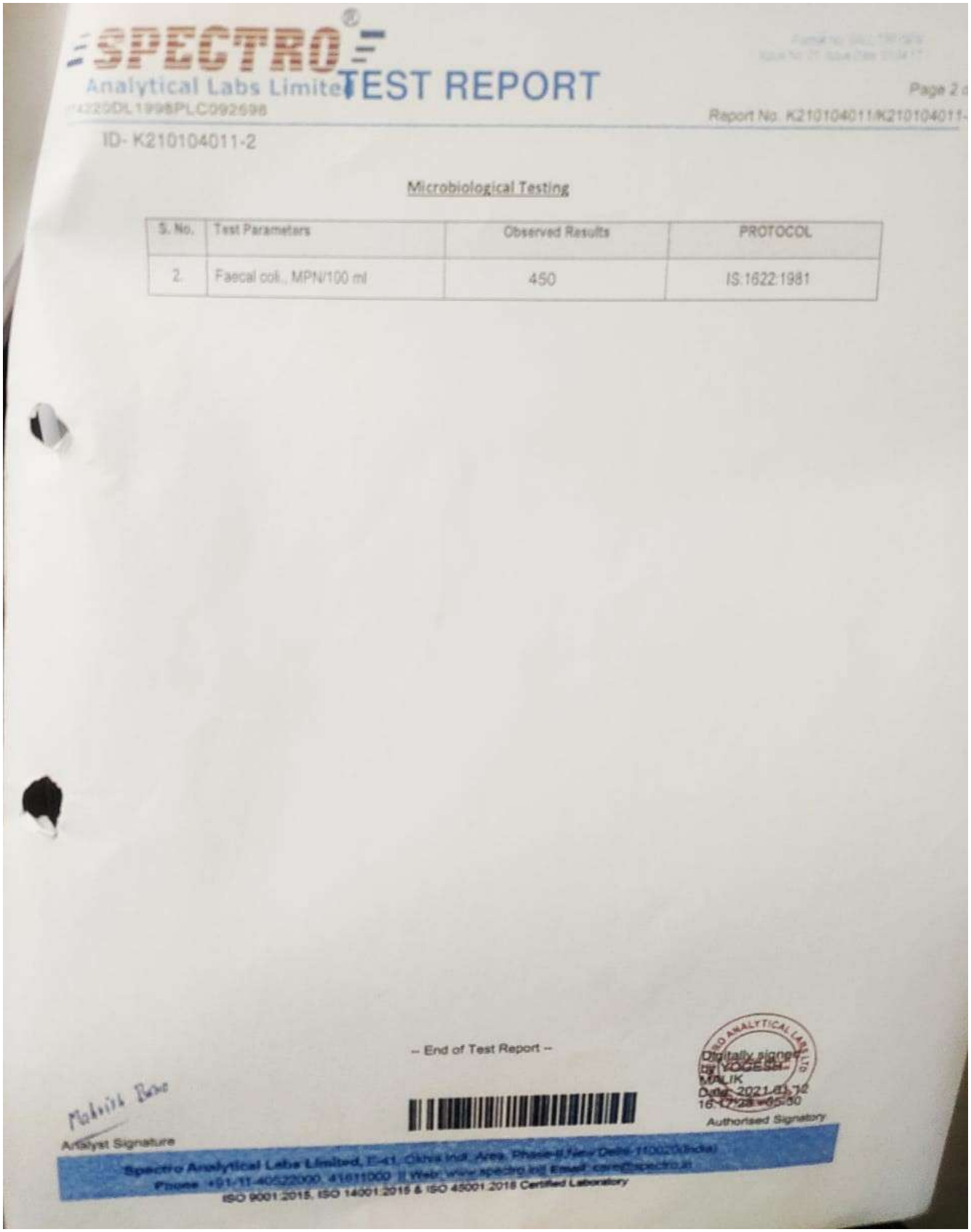
ilac-MRA
Testing(TC-7845)

SEARCH LAB VENTURES

Digitally signed by SANJEET KUMAR MISHRA
Date: 2021.01.11 16:39:43 +05:30

Authorised Signatory

Spectro Research Lab Ventures (P) Ltd. G-3, Bajrang Bali Industrial Area, Near Panki Site-IV,Kanpur-208020(India)
Phone :+91-9235503984/85 || Web: www.spectroresearchlabs.com|| Email: knp@spectro.in
ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 Certified Laboratory



SPECTRO
Analytical Labs Limited

TEST REPORT

Page 2 o

Report No. K210104011/K210104011-

ID- K210104011-2

Microbiological Testing

S. No.	Test Parameters	Observed Results	PROTOCOL
2.	Faecal coli., MPN/100 ml	450	IS:1622:1981

-- End of Test Report --

Digitally signed by YOGESH MALIK
Date: 2021.01.12 16:07:28 +05:30

Authorised Signatory

Analyst Signature

Spectro Analytical Labs Limited, E-41, Okhla Ind. Area, Phase-II New Delhi-110020(India)
Phone: +91-11-40522000, 41611000 || Web: www.spectro.in || Email: cert@spectro.in
ISO 9001:2015, ISO 14001:2015 & ISO 45001:2018 Certified Laboratory

Annexure 6: Monthly Performance Report of Bingawan for Jan. 2021

210 MLD SEWAGE TREATMENT PLANT,BINGAWAN,KANPUR
MONTHLY FLOW & LAB REPORT

MONTH:JANUARY-2021

Date	INLET FLOW in MLD	Plant Run in HRS	RAW SEWAGE						FINAL OUTLET						POWER SHUTDOWN		REMARK
			Temp	TDS	PH (7-8)	COD (523mg/l)	BOD (322mg/l)	TSS (418mg/l)	Temp	TDS	PH (7-8)	COD (<100 mg/l)	BOD (<30mg/l)	TSS (<50mg/l)			
			°c	ppm	ppm	ppm	ppm	ppm	°c	ppm	ppm	ppm	ppm	ppm	HRS	MINS	
1-Jan-21	130.18	24.0	20	1010	7.1	612	180	524	18	1070	7.2	128	28	48			
2-Jan-21	131.22	24.0	20	990	7.2	632	186	512	18	1018	7.3	120	30	44			
3-Jan-21	127.06	24.0	20	996	7.3	640	182	508	18	1030	7.3	112	28	42		30	33KV Fault from KesCO Side
4-Jan-21	126.37	24.0	20	988	7.2	632	178	516	19	1028	7.3	104	27	46	2	42	33KV Fault from KesCO Side
5-Jan-21	64.57	24.0	20	994	7.2	648	177	498	19	1020	7.2	112	29	42	18	55	33KV Fault from KesCO Side
6-Jan-21	41.14	24.0	21	990	7.3	612	180	508	18	1028	7.3	120	28	46	22	15	33KV Fault from KesCO Side
7-Jan-21	114.56	24.0	20	994	7.2	656	176	524	18	1030	7.3	128	30	44			
8-Jan-21	122.89	24.0	21	998	7.2	640	180	518	19	1032	7.3	120	29	46			
9-Jan-21	130.18	24.0	21	990	7.3	612	176	510	19	1030	7.3	112	29	48			
10-Jan-21	125.50	24.0	20	996	7.3	648	182	522	20	1036	7.2	120	30	46	2	15	33KV Fault from KesCO Side
11-Jan-21	132.10	24.0	20	998	7.2	664	180	536	18	1028	7.3	128	28	48			
12-Jan-21	129.50	24.0	20	1010	7.2	656	172	508	20	1050	7.3	120	29	44			
13-Jan-21	127.06	24.0	20	1050	7.2	620	176	522	18	1070	7.3	128	27	48			
14-Jan-21	82.63	24.0	20	1060	7.2	640	173	514	19	1070	7.2	120	29	46	12	50	33KV Fault from KesCO Side
15-Jan-21	130.18	24.0	20	1050	6.8	648	178	518	18	1060	7.1	132	30	48			
16-Jan-21	131.74	24.0	21	1055	6.9	656	168	524	18	1070	7.2	128	28	46			
17-Jan-21	127.06	24.0	20	1050	6.8	632	167	504	18	1070	7.1	120	30	52			
18-Jan-21	126.70	24.0	20	1048	6.9	648	175	512	17	1072	7.2	128	29	54			
19-Jan-21	133.14	24.0	21	1050	6.8	620	178	514	18	1070	7.2	120	30	56			
20-Jan-21	139.91	24.0	20	1058	6.7	632	155	524	19	1074	7.1	128	29	47			
21-Jan-21	133.14	24.0	21	1052	6.9	640	164	520	18	1070	7.2	120	30	48			
22-Jan-21	133.83	24.0	21	990	7.1	608	170	524	19	1030	7.3	132	30	51			
23-Jan-21	137.79	24.0	21	1030	7.1	596	168	488	19	1060	7.2	128	31	50			
24-Jan-21	133.99	24.0	20	1033	6.9	620	164	504	19	1050	7.3	120	30	52			
25-Jan-21	138.16	24.0	20	1040	7.1	596	168	472	20	1070	7.2	144	31	56			
26-Jan-21	126.19	24.0	20	1038	6.8	612	170	478	18	1064	7.2	128	32	54		35	33KV Fault from KesCO Side
27-Jan-21	119.08	24.0	20	1040	6.8	596	160	480	18	1060	7.1	144	30	52		40	33KV Fault from KesCO Side
28-Jan-21	120.12	24.0	20	990	6.8	608	152	488	18.5	1050	7.1	132	31	54			
29-Jan-21	128.62	24.0	20	1000	6.9	584	140	620	18	1130	7.2	120	34	55			
30-Jan-21	132.10	24.0	20	998	7.1	596	133	548	19	1080	7.3	112	35	52			
31-Jan-21	135.56	24.0	20	1030	6.9	584	128	496	19	1070	7.2	128	36	50			
TOTAL	3812.27																
AVG	122.98	24.00	20.3	1019.9	7.0	625.4	168.9	514.0	18.5	1,054.5	7.2	123.7	29.9	48.9			

Annexure 7: Site Inspection Report for the Month of Jan. 2021 (Bingawan)

Inspection report of 210 MLD STP Bingawan

Visit & Inspected on date 02-01-2021

Following STC & KRMPL Staff were present

1 Mr.Rahul, Support Engineer (Elect.)
2 Mr. Lokesh, Support Supervisor (Civil)
3 Mr. Shri Ram Shaste, KRMPL
4 Mr. Ashwin, Mech. Engineer, KRMPL
5 Mr.Laxman, Electrical Engineer, KRMPL
6 Mr. Shalesh, Chemist, KRMPL

Observations:-

1. **Collection Chamber**

- Out of 2 nos. of Manual screens both are in working condition.
- Out of 2 nos. of mechanical screens installed 1no. Mechanical screen is found in working condition and other 1 no. Mechanical screen is out of order since 28.01.2019.

Electrical Defects:-

Bar Screen Panel

- Voltmeter / Ammeter and phase light indicator of Bar Screen has been found not in working condition.
- Panel Earthing has been found in damaged.
- Panel indoor light not fixed.
- Some items are missing from panels and panel door has been found damaged.

2. **Main Pumping Station**

- Out of 12 nos. sewage transfer pumps installed, 11 nos. pumps are in working condition but 01 no. (Pump no.7) is not in working condition due to damaged bearing.
- EOT Crane load test to be done on date 23.12.2020 but test certificate not submitted By KRMPL as on date.

Electrical Defects:-

In Main MCC Panel MEP-2

- ACB Ammeter has been found not working condition (Outgoing).
- ACB-7 & 11 Ammeter has been found not working condition (Outgoing).

3. **Inlet chamber**

- Out of 3nos of Mechanical fine screens installed, 2 nos. are in working condition. And other one is under maintenance.
- 01 no. is sampling pump is in working condition. Cabin/cover for sampling pump is not available since 28.01.2019.
- Auto systems of all mechanical screens are not rectified. This matter is pending since 28.01.2019.

- **Electrical defects:-**
- In Inlet Control Panel indicators has been found not working condition.
- Classifier Drive –MCC Panel (Main drive -1) Ammeter has been found not working

4. Grit removal assembly
- Out of 4 nos. of Mechanical grit removal systems all are in working condition.
- Coupling guards & Chain covers are to be providing as per specification. This matter is pending since 28.01.2019.

Electrical defects:-
- Out of 4 nos. of Mechanical grit removal systems installed, 2 nos. Mechanical grit earthing has been found damaged.

5. **UASB reactor**
6. Out of 16 nos reactors, only Reactors 3 nos. (Reactor no. 1, 4 & 8) had been cleaned and filled for reactivation from 19.12.2019 till date. Reactor no. 2&3 are open for cleaning from 04.08.2020 and 20.08.2020 respectively. There is no any improvement in cleaning & reactivation activity of reactors since 20.08.2020.
7. KRMPL has not submitted schedule Programme for cleaning & reactivation of remaining 11nos. reactors yet. KRMPL is required to take-up the work of cleaning of remaining reactors at war footing. This matter is pending since 28.01.2019.
8. **Aeration pond**.
- Out of 18 nos. aerators installed, 1 no. is found not in working condition. This matter is pending since 28.01.2019.
- Painting of panels and hand railing is required to be taken up immediately.
- Most of the cable trays are in corroded condition. Need to be replaced.

Electrical defects:-
- **Aerator Panel Room**
- APFC meter showing alarm error.
- Capacitor bank no.9 Push button cover missing & Ammeter has been found not working condition.
- Panel of Alarm Annunciators has been found not working condition.
- Main Light Distribution box ammeter has been found not working condition.
- Out of 35 nos. Aeration Area Lights, 25 nos. are in working and other 10 Aeration Area Lights is found defective.

9. **Chlorination Building**
- Chlorination booster pump discharge line pressure gauge, 1no. need to be replaced with calibration report. But not complied till date.
- All 20 nos. chlorine tonners available in the chlorine room should be arrange properly,
- Only 2 nos. chlorine tonners found connected with the system.
- 6nos. tonner has been found in filled condition.

- 1 week stock is required to be available all the time.
- Heavy leakage has been found in Booster pump discharge line joint this is required To be repaired immediately.
- Painting of panels and hand railing is to be done.
- **Electrical defects:-**
- Halogen light lamp damage 2 no. in Chlorination room.
- RTU Power supply Panel earthing not done.

10. Gas holder

- Out of 2 nos. gas holder installed, 01 no is in working condition. No. 2 still to be repaired. This matter is pending since 28.01.2019.
- **Electrical defects:-**
- Bio gas flair Panel has been found damage condition.

11. DFG

- Out of 2 nos. DFG installed, 1 no. is not in working condition, under repairing by UPJN.

12. Thicken sludge transfer pump house

- Out of 3 nos. sludge transfer pump installed, 01 no. is not in working condition.
- Sludge transfer pump discharge pipe line choked.

13. Belt filter press system

- Out of 3 nos. BFP installed in BFP building, 02 nos. are in working conditions. And other one is not working condition since 28.01.2019
- All 3 nos. poly dosing pump installed, leakage found from inbuilt diaphragm portion of all 3 dosing pumps. This matter pending since 07.10.2020.
- **Electrical defects:-**
- Belt filters Press panel no.1 Voltmeter/ Ammeter has been found not working condition.
- Belt filters Press panel no.2, 500VA control transformer has been found in damage condition.
- Belt filters Press panel no.3 Voltmeter & EM Push button has been found damage.

12. Online Monitoring System:-

- Calibration certificate with witness certificate till not submitted by KRMPL. on 2.01.2021 found there is too much difference in the reading of RTLOMS and laboratory results of (2.01.2021) produced below:-

  Analyser Inlet Reading- COD=672.6 mg/l , TSS=494.1mg/l
  Analyser outlet Reading-COD=119.2 mg/l , TSS=57.17mg/l
  Laboratory Inlet Reading-COD=632 mg/l , TSS=508mg/l
  Laboratory outlet reading-COD=120 mg/l , TSS=50mg/l

- Out of 2 no's Electro-Magnetic Flow meters in inlet, 1 no. has been installed at site and it has been synchronised with RTOLMS. It is not calibrated. Another 2nd no. Electro-Magnetic Flow meters has not been installed yet. Need to be providing calibration report.

- Online monitoring system, RTU, DNP & UPS installed at Inlet & Outlet, and it has been synchronised with RTOLMS and testing results (COD, BOD & TSS) are changing for every 15 minutes. Calibration certificates (Inlet & Outlet analyser) are not found yet.
- It is also necessary to update the proper power consumption and timing of both Power supply and Power backup (DG set) in RTOLMS.
- Electromagnetic flow meter for treated effluent has not been installed yet. Installation of Flow meter at the Treated effluent channel of the STP is necessary and should be synchronised with RTOLMS.

13. **Miscellaneous:-**
    - Balance boundary wall work is to be completed by UPJN.
    - MPS outlet valve chamber wall has been found collapsed due to earth pressure. Cracks have been also developing in the road leading to MPS this to be repaired urgently.
    - In Main LT Panel capacitor bank 800KVAR Transformer 1, no. voltmeter not working
    - Sodium Light lamp 9 no. & some street lighting not fixed.
    - Street Light Junction boxes have loose mounting & are damage, some junction box is missing.
    - All Rusted junction boxes & Panels are to be painted.
    - According to the Operation & Maintenance Manual chapter xii 8.2.2 Panel, Circuit Breaker, Starter
    - Daily, Monthly /Quarterly and Annual Maintenance record not maintain in register.
    - Transformer no.1 breather silica gel in pink colour to be replaced & Transformer no.2 Breather damage.
    - HT power cable damage since last 2 months.{180 sq.mm)
    - Transformer -1 incomer panel Voltmeter/Ammeter has been found not working in MCC-1 Room.

Mr.Lokesh Khandelwal
Supt. Supervisior (Civil)

Mr.Rahul
Supt.Engineer (Elect.)

Inspection report of 210 MLD STP Bingawan

Visit & Inspected on date 23-01-2021

Following STC & KRMPL Staff were present

1 Mr. Ajay Kumar Goyal , Support Engineer (Mech.)
2 Mr.Rahul, Support Engineer (Elect.)
3 Mr. Lokesh, Support Supervisor (Civil)
4 Mr. Ashwin, Mech. Engineer, KRMPL
5 Mr. Shalesh, Chemist, KRMPL

Observations:-

1. **Collection Chamber**

- Out of 2 nos. of Manual screens both are in working condition.
- Out of 2 nos. of mechanical screens installed 1no. Mechanical screen is found in working condition and other 1 no. Mechanical screen is out of order since 28.01.2019.

Electrical Defects:-

Bar Screen Panel

- Voltmeter / Ammeter and phase light indicator of Bar Screen has been found not in working condition.
- Panel Earthing has been found damaged.
- Panel indoor light not fixed.
- Some items are missing from panels and panel door has been found damaged.

2. **Main Pumping Station**

- Out of 12 nos. sewage transfer pumps installed, 04 nos. are not in working condition.
- EOT Crane load test was done on date 23.12.2020 but test certificate not submitted By KRMPL as on date.

Electrical Defects:-

In Main MCC Panel MEP-2

- ACB Ammeter has been found not in working condition (Outgoing).
- ACB-7 & 11 Ammeter has been found not in working condition (Outgoing).

3. **Inlet chamber**

- Out of 3nos of Mechanical fine screens installed, 2 nos. are in working condition. And other one is under maintenance.
- 01 no. is sampling pump is in working condition. Cabin/cover for sampling pump is not available since 28.01.2019.
- Auto systems of all mechanical screens are not rectified. This matter is pending since 28.01.2019.
- **Electrical defects:-**
- In Inlet Control Panel indicators have been found not working in condition.

- Classifier Drive –MCC Panel (Main drive -1) Ammeter has been found not working

4. **Grit removal assembly**

- Out of 4 nos. of Mechanical grit removal systems all are in working condition.
- Coupling guards & Chain covers are to be provided as per specification. This matter is pending since 28.01.2019.

Electrical defects:-

- Out of 4 nos. of Mechanical grit removal systems installed, 2 nos. Mechanical grit earthing has been found damaged.

5. **UASB reactor**

- Out of 16 nos reactors, only Reactors 3 nos. (Reactor no. 1, 4 & 8) had been cleaned and filled for reactivation from 19.12.2019 till date. Reactor no. 2&3 are open for cleaning from 04.08.2020 and 20.08.2020 respectively. There is no any improvement in cleaning & reactivation activity of reactors since 20.08.2020.
- KRMPL has not submitted schedule Programme for cleaning & reactivation of remaining 11nos. reactors yet. KRMPL is required to take-up the work of cleaning of remaining reactors at war footing. This matter is pending since 28.01.2019.
- Depth of all the reactors measured on 23.01.2021 and produced in the table below.

Rector No.	Depth as per drawing(Meter)	Depth as measured(meter)	Sludge filling depth(Meter)	Remark
01	5.7	3.9	1.8	Sludge Blanket not formed.
2	Cleaning under progress			
3	Cleaning under progress			
4	5.7	4.7	1	Sludge Blanket not formed.
5	5.7	1.4	4.3	Filled with sludge
6	5.7	1.9	3.8	Filled with sludge
7	5.7	1.5	4.2	Filled with sludge
8	5.7	5.0	0.7	Sludge Blanket not formed
9	5.7	1.75	3.39	Filled with sludge
10	5.7	1.65	4.05	Filled with sludge
11	5.7	1.6	4.1	Filled with sludge

12	5.7	2.1	3.6	Filled with sludge
13	5.7	1.95	3.75	Filled with sludge
14	5.7	1.5	4.2	Filled with sludge
15	5.7	1.60	4.1	Filled with sludge
16	5.7	1.5	4.2	Filled with sludge

- From the above table it is clear that remaining reactors are filled with sludge and need to be cleaned & reactivated. Reactors Nos. 1,4 & 8 have been filled but Sludge Blanket has not been formed yet even after 8 months. Activated sludge was required to be mixed to reactivate but that has not been done.

6. Aeration pond.

- Out of 18 nos. aerators installed, 2 nos are not in working condition.
- Painting of panels and hand railing is required to be taken up immediately.
- Most of the cable trays are in corroded condition. Need to be replaced.
- As per measured data as shown in the table below. Sludge filled in the aeration tanks. Cleaning of aeration tanks is required .

Aeration Tank Compartment	Depth as per drawing(Meter)	Depth found as measured(meter)	Sludge filling depth(Meter)
Unit -1	4.5	2.140	2.36
	4.5	0.65	3.85
	4.5	2.8	1.7
	4.5	1.340	3.16
Unit-2	4.5	2.8	1.7
	4.5	2.75	1.75
	4.5	2.350	2.15

Electrical defects:-

- **Aerator Panel Room**
- APFC meter showing alarm error.
- Capacitor bank no.9 Push button cover missing & Ammeter has been found not working condition.
- Panel of Alarm Annunciators has been found not working condition.
- Main Light Distribution box ammeter has been found not working condition.
- Out of 35 nos. Aeration Area Lights, 25 nos. are in working and other 10 Aeration Area Lights is found defective.

7. Chlorination Building

- Chlorination booster pump discharge line pressure gauge, 1no. need to be replaced with calibration report. But not complied till date.
- All 20 nos. chlorine tonners available in the chlorine room should be arrange properly,
- Only 2 nos. chlorine tonners found connected with the system.
- 4 nos. tonner has been found in filled condition.
- 1 week stock is required to be available all the time.
- Heavy leakage has been found in Booster pump discharge line joint this is required To be repaired immediately.
- Painting of panels and hand railing is to be done.
- **Electrical defects:-**
- Halogen light lamp damage 2 no. in Chlorination room.
- RTU Power supply Panel earthing not done.

8. **Gas holder**

- Both are gas holder not in working condition . This matter is pending since 28.01.2019.
- **Electrical defects:-**
- Bio gas flair Panel has been found damage condition.

9. **DFG**

- Out of 2 nos. DFG installed, 1 no. is not in working condition, under repairing by UPJN.

10. **Thicken sludge transfer pump house**

- Out of 3 nos. sludge transfer pump installed, 01 no. is not in working condition.
- Sludge transfer pump discharge pipe line choked.

11. **Belt filter press system**

- Out of 3 nos. BFP installed in BFP building, 02 nos. are in working conditions. And other one is not working condition since 28.01.2019
- Out of 3 nos. poly dosing pump installed, leakage found from inbuilt diaphragm portion of 1no. Dosing pump. This matter pending since 07.10.2020.
- 02 Nos trolley Available at site for sludge disposal but not enough, as site requirement 04 nos trolley required for sludge disposal.
- Sludge disposal record not found at site.
- Sludge Testing Arrangement not available in the Laboratory.
- **Electrical defects:-**
- Belt filters Press panel no.2, 500VA control transformer has been found in damage condition.
- Belt filters Press panel no.3 Voltmeter & EM Push button has been found damage.

12. **Final Polishing Unit**:- As per measured data as shown in the table below. Sludge filled in the Final Polishing units. Cleaning of Final polishing units is required .

Final Polishing Unit Compartment	Depth as per Drawing(Meter)	Depth found as measured(meter)	Sludge filling depth(Meter)
Unit-01	1.8 1.8	1.29 0.84	0.51 0.96
Unit-02	No access to reach at FP unit	Could not be measured but it is visible that pond is filled with sludge.	

13 . CCT Tank:-Following data Measured:- As per measured data as shown in the table below. Sludge filled in the CCT tanks. Cleaning of CCT tanks is required .

CCT (Readings)	Depth as per drawing(Meter)	Depth found as measured(meter)	Sludge filling depth(Meter)
1	3.5	3.460	0.04
2	3.5	3.260	0.24
3	3.5	3.200	0.3
4	3.5	3.260	0.24

14. Online Monitoring System:-

- Calibration certificate with witness certificate till not submitted by KRMPL. on 23.01.2021 found there is too much difference in the reading of RTLOMS and laboratory results of (23.01.2021) produced below:-
  Analyser Inlet Reading- COD= 541.3mg/l , TSS=447.6mg/l
  Analyser outlet Reading-COD=125.3 mg/l , TSS=57.79mg/l
  Laboratory Inlet Reading-COD=640 mg/l , TSS=510mg/l
  Laboratory outlet reading-COD=136 mg/l , TSS=48 mg/l
  The above results show that lab results are higher own higher side.
- Out of 2 no's Electro-Magnetic Flow meters in inlet, 1 no. has been installed at site and it has been synchronised with RTOLMS. It is not calibrated. Another 2nd no. Electro-Magnetic Flow meters has not been installed yet. Need to be providing calibration report.
- Online monitoring system, RTU, DNP & UPS installed at Inlet & Outlet, and it has been synchronised with RTOLMS and testing results (COD, BOD & TSS) are changing for every 15 minutes. Calibration certificates (Inlet & Outlet analyser) are not found yet.
- It is also necessary to update the proper power consumption and timing of both Power supply and Power backup (DG set) in RTOLMS.
- Electromagnetic flow meter for treated effluent has not been installed yet. Installation of Flow meter at the Treated effluent channel of the STP is necessary and should be synchronised with RTOLMS.
- Cable laying work of sampling pump not done properly.
- Sampling pump cable conduit not fixed.
- Sampling pump fan blade damage.
- Cable dressing not done properly.
- Sampling pump fan blade cover bolt are missing.

15. Miscellaneous:-

- KRMPL had Total Sludge is dumped in the Plant .It's not Good Practice By KRMPL.
- Balance boundary wall work is to be completed by UPJN.

- MPS outlet valve chamber wall has been found collapsed due to earth pressure. Cracks have been also developing in the road leading to MPS this to be repaired urgently.
- In Main LT Panel capacitor bank 800KVAR Transformer 1, no. voltmeter not working
- Sodium Light lamp 9 no. & some street lighting not fixed.
- Street Light Junction boxes have loose mounting & are damage, some junction box is missing.
- All Rusted junction boxes & Panels are to be painted.
- According to the Operation & Maintenance Manual chapter xii 8.2.2 Panel, Circuit Breaker, Starter
- Daily, Monthly /Quarterly and Annual Maintenance record not maintain in register.
- Transformer no.1 breather silica gel in pink colour to be replaced & Transformer no.2 Breather damage.
- HT power cable damage since last 2 months.(180 sq.mm)
- Transformer -1 incomer panel Voltmeter/Ammeter has been found not working in MCC-1 Room.

Mr. Ajay Kumar Goyal	Mr.Rahul	Mr.Lokesh Khandelwal
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